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School Culture, Teacher Efficacy, and Decision - Making in Demonstrably Effective and Ineffective Schools.

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SCHOOL CULTURE, TEACHER EFFICACY, AND DECISION MAKING IN DEMONSTRABLY EFFECTIVE AND INEFFECTIVE SCHOOLS

A Dissertation

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ABSTRACT

The purpose for this study was fourfold. First, a conceptual model was developed to help understand teacher perceptions of the schools' professional culture, teachers' self-efficacy beliefs, participation in decision making and linkages to school effectiveness. Second, an original measure of teachers' self-efficacy beliefs about their own teaching effectiveness was developed and tested. Third, characteristics of the measures (quantitative and qualitative) were reported. Fourth differences in the mediating variables related to school effectiveness were examined.

A stratified sample made up of 1,057 total school faculty in 41 elementary schools representing the uppermost and lower most quartiles of poverty in a southern state was used. Complete and useable data were collected from 555 teachers in 34 schools. Three measures were used for quantitative analyses: the Revised School Culture Elements Questionnaire-Short Form, the Teachers' Self-Efficacy Beliefs Scale-Short-Form , and the Teacher Decision- Making Scale. Case study research enhanced the study by providing additional data from twelve teachers in two schools. Data collection tools included the focus group protocol, contextual observation checklist, and existing school improvement plans.

Major findings of this study showed: 1) a statistically significant and strong positive relationship between teacher perceptions of the school's professional culture and school effectiveness, 2) that the strength of teachers' self-efficacy beliefs was linked to the schools' professional culture and to school effectiveness, 3) teacher participation in decision-making was not directly related to school effectiveness, but rather to dimensions of the school's professional culture, and 4) qualitative analyses enhanced the

quantitative findings and helped provide meaningful explanations, supported the trustworthiness of the study, and clarified the study findings.

The results in this study supported the theoretical framework used to understand the schools' professional culture, teachers' self-efficacy beliefs, and participation in decision making as part of each school's dynamic social system. Collectively, the study variables represent complex process dimensions that can be used to understand how to create a school that demonstrates quality and effectiveness.

CHAPTER ONE: INTRODUCTION

Overview

There has been a long history of concern for both the quality of education and the effectiveness of public schools in America. Since the 1600s, the essence of this concern has involved decisions about the appropriate *means* and *ends* of education (Cubberly, 1923; Britell, 1980). Consequently, ongoing educational reform initiatives focus resources and services on meeting the needs of students, teachers, principals, and schools. Recently, a number of authorities have called into question whether, and if so, how these recurring educational reforms have actually changed or improved schooling (Britell, 1980; Murphy, 1989; Cuban; 1990, Fullan, 1993; Darling-Hammond, 1993; Rothman, 1993; Tyack and Cuban, 1995; Berliner and Biddle, 1995; Cusik, 1996; Pogrow, 1996; Fullan, 1997; Wagner, 1998; Barott & Raybould in Pounder, 1998; Orrill, in Pounder, 1998). Despite ongoing reform efforts and documented successes in some areas of education, achievement gaps remain persistent and have widened between some student populations. This study explores new conceptions of school improvement within a theoretically grounded and research-based foundation to understand the *means* utilized to enhance the quality of education and the effectiveness of the *ends*.

The chapter is organized as follows: 1) contemporary issues from the field of educational administration; 2) issues that establish the study context; 3) research on school effectiveness; 4) research on social systems, educational change, school culture, teacher self-efficacy, and decision making; 5) the conceptual framework developed to guide the study; 6) problems, purpose, and importance of the study;

conceptual and operational definitions; 8) hypotheses, research questions, and rationale used to generate them; and 9) assumptions and limitations of the study.

Contemporary Issues

The impetus for this study, in part, was driven by the call for further exploration of school culture. It may surprise some educators to learn that the National Policy Board for Educational Administration formally acknowledged that societal and cultural influences constitute "knowledge essential for school leaders to solve critical contemporary problems of practice" within the last decade (Donmoyer, in Murphy & Louis, 1999 p. 30). However, the study was also driven by two prevalent themes in national discussion about education centered on accountability systems and school improvement. According to the National Center for Educational Statistics all states, with the exception of Hawaii, have adopted some type of system (e.g., centralization, market-approach, and or site-based decision-making) through which diverse types of change aim to improve student performance (Fuhrman, 1999). Raising student achievement and developing the capacity to carry out the objectives designed to meet higher standards have generated greater concentration on needs assessments and the search for strategies to bring about change (Fuhrman, 1999). Independently, the fields of research that were aligned to support this study have produced valuable information. However, some authorities have suggested that the research findings must be conceptualized within appropriate and meaningful contexts (Firestone & Louis and Rowan & Miskel in Murphy & Louis, 1999). That is, past research findings in many studies have not clearly delineated the contexts in which reported successes were found and may therefore not be broadly applicable.

These authors suggested that new studies are needed to correct this intellectual shortfall if true progress is to be made to the quality of schooling.

Recent accountability systems provide school districts with some flexibility to identify, document, and correct their own educational deficiencies. The ongoing concern of many educators is to ensure that goals to document improvements in student achievement do not become, or obscure, the vision that represents the overall quality of education (Britell, 1980; Cuban, 1990).

Three predominant issues in the literature on educational reform include school effectiveness, school change, and accountability. First, there has been a rich history of empirical studies on school effectiveness conducted for over the past thirty years which describe a number of characteristics that can be attributed to both effective and ineffective schools (Teddlie and Reynolds, 2000). Secondly, current conceptions of educational change delineate the contexts for successfully managing, sustaining, and facilitating learning environments that are conducive to and inspire the acceptance of ongoing changes needed to improve schooling (Hord, 1988; Fullan, 1993; Senge, 1994). Finally, while accountability systems may initiate educational reforms, successful school improvement has been attributed to those individuals most responsible for achieving targeted goals and to the conditions that support the aims and sustain conditions when successful (Darling-Hammond, 1993; Glass, 1994; Furhman, 1999). Yet, despite the empirical research generated from these and other related lines of inquiry, still unanswered is *how to create* schools that provide a quality education for all students.

This study attempts to enhance the knowledge base by clarifying how to create schools that provide quality education for all students and that demonstrate

effectiveness in the traditional sense. Three promising conceptions are used in this endeavor: the school's professional culture, teachers' self-efficacy beliefs, and teacher involvement in decision-making. These conceptions represent components of complex social processes that generate and perpetuate teachers' perceptions of and beliefs about the quality of schooling. Each of these variables is discussed next.

School culture, in this study, reflects teachers' actual perceptions of the school environment in terms aligned with characteristics of an effective school (e.g., strong principal leadership, collaborative networks, safety, etc.) (Cavanagh, 1997). The foundation of the school culture represents a process in which complex social dynamics sustain the shared norms, beliefs, and values responsible for creating their perceptions of the quality of administration, level of professional support, and level of professional effort expended to produce a quality teaching and learning environment. Cavanaghs' initial work has provided a conceptual framework for understanding professional elements and transformation of the schools' culture and School Improvement Model of School Culture (1997). In addition, subsequent research provides empirical support for utilization of the School Culture Elements Questionnaire (SCEQ) as an index of the schools' professional culture. Timely development of the SCEQ measure answers a recent call for additional studies that examine the relationship between school culture and school effectiveness (Firestone & Louis, 1999).

In addition, teachers' self-efficacy beliefs, a relatively new concept in the field of educational administration, were explored. Bandura (1977) first proposed self-efficacy theory as a subconstruct of social cognitive theory developed from the field of psychology. Social cognitive theory attempts to understand human behavior

by integrating the individual with the environment and has been popularly applied in classroom behavior management plans. Self-efficacy, as a subtheory, is defined as a personal belief system "in one's capabilities to organize and execute various courses of action required to produce given attainments (Bandura, 1997, p.3). Though a number of studies have examined teacher efficacy (Tshannan-Moran, Hoy, & Hoy, 1999), Bandura's idea has not been investigated to any degree within the context of accountability, school improvement, and school effectiveness.

Teacher involvement in decision-making was also included in this study because of the importance attributed to it as viable part of school improvement (e.g., Coch & French, 1948; McCormack-Larkin, 1985; Rosenholtz, 1985; Taylor and Bogotch, 1994; U.S. DOE, Undersecretary, 2000). The literature and research in this area qualifies teacher participation in decision-making as effective when the decisions are perceived by the teacher to be relevant and practical, and when they represent the best alternative available (March 1994). Still weak is any empirical evidence of a direct linkage between decision-making and school effectiveness. This dubious linkage was examined further in this present study in terms of the schools' context generated by teacher personal and school contextual variables.

The dimensions of schooling that are embedded within the cognitive processes that generate perceptions of the schools' professional culture, teachers' self-efficacy beliefs, and that motivate involvement in decision-making are complicated by a myriad of other issues which are beyond the scope of this study. This study integrated these processes to formulate a conceptual framework that was used to guide the study and clarify the inferences made relevant to providing quality education within demands for accountability.

The next section provides the context for the study as represented by the related literature and research used to understand current conceptions in education. Research and the professional literature describing relevant aspects of school effectiveness, socioeconomic conditions of students, accountability, educational change, school culture, teacher self-efficacy, and decision making are presented.

Study Context

In a synthesis of five studies, Ellett (1997) describes an evolution of related research grounded in the literature that envisions schools as complex social systems (Getzels & Guba, 1957; Lipham, 1981; Hoy & Miskel, 1991), change as an ongoing process (Cuban, 1990; Murphy, 1990; Astuto & Clark, 1985; Hall & Hord, 1989; Teddlie & Stringfield, 1993; Darling-Hammond, 1990; Fullan, 1990), correlates of school culture in terms of school improvement, effectiveness, and productivity (Firestone & Wilson, 1985; Wimpelberg, Teddlie, & Stringfield, 1989; Teddlie & Stringfield, 1993), the impact of school restructuring and professionalism on school effectiveness (Darling-Hammond & Goodwin, 1993; Fullan, 1993; Rungeling & Glover, 1991), and characteristics of the school environment that enhance learning (Licata & Johnson, 1989; Fraser & Walberg, 1991; Wang, Haertel, & Walberg, 1993; Loup, 1994) (p.273-274). Collectively, these multiple lines of inquiry have provided a conceptual context that conveys schools as dynamic communities. Such communities require ongoing reevaluation of change processes and adaptations occurring within the learning environment.

Conceptions of school effectiveness have broadened over time. Traditional indicators such as student achievement and student attendance used to understand school productivity and school holding power are now joined by conceptions of

effectiveness in terms of the perceived quality of leadership and the whole learning environment. This study emphasized that the dynamics within the school infrastructure (vis-à-vis school culture, sources of self-efficacy, and teacher participation in decision-making) influences the perceptions and thus, actions of individuals. Specifically examined was how teachers use multiple sources of information to either confirm or disconfirm their beliefs. Teacher perceptions were examined within the contexts of demands for accountability, high stakes testing, and percentage of poverty faced by the student population. The next sections offer brief discussions of the related literature that was used to support the exploration of these study dimensions and their multiple connections to school effectiveness.

School Effectiveness Research (SER)

Ellwood Cubberly (1923) joined others during the early 1900s to professionalize teaching through educational administration. An important distinction was made at that time between the application of coursework as a stimulus to thinking and its application as the end and aim of work (p.389). Cubberly's work introduced an awareness of the complexity of schooling and helped clarify its nature as more than involving the perfunctory elicitation of facts and skills from pupils. Concerns for the philosophical underpinnings about the purpose for education in these early years are persistent. At this philosophical root, was an ongoing struggle with defining the appropriate means and ends of education.

Defining school effectiveness has been a challenge. Attempts from the business sector during the 1960s for example helped initiate conceptions of effectiveness that were eventually linked to the quality of the individual's education (Drucker, 1966, p.1). This focus on quality came from multiple sectors (e.g.,

business and government) and supported the view of education as the competitive advantage being offered in the United States and helped establish a mindset bent on understanding, measuring, and creating effective schools. Researchers in education eventually coined this era as the *effective schools movement* (Cuban, 1984; Odden, 1995). Developments from this line of research are shared next.

Evolution of SER

Three strands of school effectiveness research (SER) in the United States have developed over the past thirty years (i.e., school effects, school effectiveness, and school improvement) (Teddlie & Reynolds, 2000). In their handbook, Teddlie and Reynolds (2000) succinctly explain four broad overlapping stages of research that reflect technical, methodological, and conceptual advancements produced from this line of inquiry. Research trends of the 1960s concentrated on school outcomes, while trends during the 1970s brought to light expanded conceptions of effectiveness that appreciated the value of school inputs. Growing sophistication in research helped provide an examination of key characteristic (i.e., correlates) found in effective schools during the 1980s. More recent studies incorporate the examination and discussion of contextual variables that are believed to effect the school environment (Teddlie & Reynolds, 2000, p.4).

Historically, characteristics of effective and ineffective schools have been described. Chamberlin and Chamberlin (1943), for example, examined differences in student performances in progressive and traditional schools (in Taylor & Bogotch, 1994). Coleman (1966; 1987) examined differences in effectiveness defined in terms of the external influence of factors such as socioeconomic status and parental involvement (Gutherie, 1988; Taylor & Bogotch, 1994; Joyce &

Showers, 1995). Case studies from the effective schools research, published by the National Center for Effective Schools, helped define school improvement as a unique, and ongoing process stipulating that support from the central office is key to sustained positive change (Lezotte, 1990). Case study research was also credited for finding that effective schools have clear missions, publicly display student performance data, and build in time to plan (Lezotte, 1990). Other studies examined effectiveness in organizational terms (Brookover et al., 1978; Edmonds, 1979; Johnson, 1991; Claudet, 1993; Loup, 1994).

Brookover et al. (1978), Edmonds (1979), Rutter (1979), Levine & Lezotte (1990), and Levine (1991) introduced new methodologies and criteria for identifying effective and ineffective schools in terms of organizational and systematic differences (Joyce & Showers, 1995). Interest in the effects of organizational structures led Meyer and Scott (1983, 1991 in Murphy & Louis, 1999) to develop an organizational typology that is particularly useful for understanding distinctions between technical aspects (rules that demand and reward performance) and the institutional environment (rules that demand and reward conformity). Using the authors theory, technical and institutional environments are categorized as follows:

a) those that demand performance (e.g., as in business);

b) those that demand institutional conformity (e.g., as in schools);

c) those that demand performance and institutional conformity e.g., hospitals); and,

d) those with weak demands on both performance and conformity (e.g., personal service establishments).

(Rowan & Miskel, in Murphy & Louis, 1999 p. 364).

The combination of pressures from accountability systems (which aim for conformity in school performance) and for school effectiveness (which aim for raising student achievement and student attendance) represent a major shift in the demands from schooling. This combination requires a degree of professionalism that is parallel to that required by the medical profession. Consequently, there are major implications for an educational foundation that parallels that of the medical profession and for an environment that demands and supports ongoing teacher education, teacher licensing, professional development, and strong leadership to that end.

Paul E. Mott (1972) advanced a strand of scholarly inquiry that examined the organizational effectiveness of schools in terms of goal attainment, adaptability, integration, and latency (Loup, 1994; Hoy & Miskel, 1996). Of importance to this study, was the growing body of empirical research (e.g., studies by Miskel, Fevurly, & Stewart, 1979; Miskel, Bloom & McDonald, 1980,1983; Hoy & Ferguson, 1983) that supports Mott's initial conclusion that, "subjective evaluations by employees (of features of the organization) provide a fairly valid measure of organizational effectiveness" (in Hoy & Miskel, 1996, p. 255). The association between organizational effectiveness and other indices of effectiveness (e.g., structural coupling, robustness, academic achievement, and student attendance) has been supported in recent research (Logan, 1990, Johnson, 1991,Chauvin, 1992, and Claudet, 1993, Logan, Ellett & Licata, 1993; Ellett et.al, 1997). Thus, teachers'

perceptions of the quality of the school environment provide a reliable source for understanding the processes linked to school effectiveness.

Within the evolution of school effectiveness, measuring and defining (e.g., as output, input, contextually influenced, and influenced by organizations infrastructures) its effects whether a public or private school translate into collaborative networks and leadership that envisions success in all aspects of schooling (Odden, 1995). Of relevance in this present study is that ongoing school effectiveness research has expanded not only the conceptions of how to define a schools' effectiveness, but also the possibilities for how this definition translates into strategies for school improvements (Hoy & Miskel, 1996, p.255).

Despite the ongoing progression of empirical research that has explored and helped redefine correlates and characteristics of an effective school, criticisms abound. These criticisms are shared in the next section. Divergent empirical research has helped challenge preconceived notions of and initiated incremental changes to conceptions of school effectiveness (Teddlie and Reynolds, 2000). In sum, attempts to emulate the correlates of an effective school (surface level changes) must be coupled with fundamental elements that are generated and sustained within the school environment.

Criticisms of SER

An early criticism of the school effectiveness research was the concentrated focus on elementary schools. Later studies (e.g., Goodlad, 1984; Lightfoot, 1983; Sizer, 1984; Corcoran & Wilson, 1986) however that examined secondary schools found similar patterns and correlates to those found in elementary schools (Odden, 1995).

A more recent criticism of the school effectiveness research has been that the findings tend to focus reform efforts on limited strategies that duplicate functional roles and resources across schools (Claudet, 1993; Joyce & Showers, 1995; Louis, Toole, & Hargreaves, 1999).

Yet another criticism has been a tendency for the effectiveness indicator (e.g., student achievement scores or student attendance) to become the *ends* of education. As an example, the use of student achievement as the indicator of school effectiveness typically generates a response to standardize and align the curriculum, textbooks, and workbooks, and to 'teach to the test' (Cuban, 1983, 1984; Teddlie & Stringfield, 1993; Steadman, 1987 in Hoy & Miskel, 1996). These efforts tend to permeate conceptions of effectiveness and consume human and fiscal resources, but will eventually fall short if not sustained by larger conceptions that encourage professional development and ongoing learning that allows the adaptation to new information.

The latest criticism of school effectiveness research has been that it is "silent on the issue of how to get there -- the process by which less effective schools may become more effective" (Louis, Toole, & Hargreaves, 1999, p. 254). Many agree that school effectiveness research has done more to generate questions than answer them. Still perplexing are root causes of the variation in school effectiveness and how to build the capacity needed to sustain and/or modify conditions accordingly (Zammuto, 1982; Mingers, 1995). Some scholars believe that more studies are needed that provide an explanation of the contexts within which effectiveness is created (Firestone & Louis, 1999).

Contexts for SER

Contextual elements are used to reflect aspects of the total environment and their collective influence on school effectiveness. Examples typically include the level of community and parental involvement, income level, size and wealth of the community, and general perceptions about the individual school (Bryk & Driscoll, (1988), Hill et al. (1990), Bryk, Lee, & Smith (1991), and Lee, Bryk, & Smith (1993), in Odden, 1995). This study explored whether there were differences in the processes linked to school effectiveness within the context of student poverty. The issue of poverty is discussed next.

Poverty (POV)

According to the National Center for Educational Statistics in 1994, 21.2 percent of all children less than 18 years old lived in families with incomes below the poverty level. Although reports well document that the socioeconomic status of the student population accounts for most of the variation in student achievement (e.g., Coleman, 1966; Rutter, 1983; Heyneman, 1983; Griffith, 1989; Jencks, 1972; Mosteler & Moynihan, 1972), poverty (and wealth) is generally accepted as an uncontrollable factor with which schools must contend.

Numerous educational services have been provided through education to offset the disadvantages caused by poverty such as hunger, neglect, and emotional stress (Odden, 1995). However, these services are viewed as only short-term solutions to offset the impact of these disadvantages. Some authorities believe that the development of higher order thinking skills in children will provide the kind of long-term relief needed (Odden, 1995). The development of higher order thinking skills is viewed as a strategy for overcoming the disadvantages caused by poverty.

It can be inferred that such a strategy would require strong administrative support, ongoing professional development, and teachers that are personally and professionally committed to instilling this capability in children. Developing the capacity in local school systems to overcome latent educational disadvantages due to poverty is an underlying goal of accountability systems targeting increased student performance for all students. Coupled with recent federal challenges that target academic improvement for disadvantaged students, it is evident that a critical part of developing local capacity involves creating environments that encourage and support ongoing professional development at all organizational levels. The next section presents more on the issue of accountability systems and perceptions of the challenges and difficulties they present.

Accountability

Accountability systems have flourished as policymakers push for changes in all directions to improve school performance. Higher standards, public reporting of performance, incentives, and school restructuring are some examples of recent changes targeting results (Glass, 1994; Fuhrman, 1999; Kelly, Odden, Milanowski, & Heneman III, 2000). The Office of Education Research and Improvement views accountability systems as powerful policy tools particularly when linked to high stakes testing (Cohen & Spillane, 1994). However, many argue that motivating change in this manner is not only ineffective, but also leads to unintended consequences such as narrowed curriculum, poor teacher morale, irregular testing practices, and biased data gathering (Fetler, 1990; Joyce & Showers, 1999).

School performance reports (e.g., school report cards) typically reflect structural characteristics of the school environment (size of school, demographic

data etc.) that are used to make inferences about the quality that is responsible for producing school outcomes. These kinds of reports have been criticized for ignoring other influential facets of schooling such as school culture, norms, beliefs, and values (Glass, 1994).

One major problem introduced by accountability systems that target increased student achievement is the risk of discovering that effective solutions may be more costly in terms of fiscal and human resources than anticipated and than can be afforded (Fuhrman, 1999). These complexities and urgency to produce quick results set up a weak and unstable support structure. In the present state of accountability, inability at the state level to help schools develop the capacity needed to attain goals has forced most school districts to shop around for a variety of *proposed* remedies (Fuhrman, 1999).

Another problem related to perceptions of whether accountability systems are transitional or weak is grounded in lessons learned from findings from the Hawthorne studies of Elton Mayo conducted during the 1930s. These studies document the temporary, positive effects that are the result of *attention*, not substantive changes that actually increased productivity. For purposes of accountability, temporary attention to student and school performance may help generate initial activities to make desired changes that address short term needs, but for educators the importance to sustain the changes that bring about positive results for children and schools represent long term needs.

The search for ideas for developing the local capacity to improve schools has typically involved changes to structural characteristics (e.g., staffing, budgeting, curriculum, and technology). More recently however, sustained changes that bring

about school improvement have been portrayed in terms of their influence on the internal shared beliefs, norms, values and effort to positively impact student and school performance (Glass, 1994; Fuhrman, 1999; Kelly, Odden, Milanowski, & Heneman III, 2000).

The goals for education that target student proficiency in the United States can be traced as far back as 1709, when the Committee of Gentlemen for a Liberal Education first utilized teaching assessments (Britell, 1980). School administrators in the 21st century are faced with the complex task of understanding and delineating whether educational remedies involve the bureaucratic structure, individual needs, shared culture, political influences, or organizational goals and functions (Rossman, Corbett, & Firestone, 1988; Hoy & Miskel, 1996). Accountability systems increase the pressure on school administrators to create schools that are deemed effective in terms of high student performance. The strategies selected to either create or sustain perceptions of effectiveness, however, may explain distinctions between perceptions of the *good* and the *effective* school (Ellett, et al., 1997).

School effectiveness is an evolving concept, however accountability for results has remained relatively constant in terms of goals to raise student performances. Raising student achievement (a goal of accountability and part of high stakes testing policies) has regenerated national interest in *how to create* learning environments to accomplish this goal. The next sections present a framework for understanding schools as complex social systems, change as an ongoing process, and successful performance as mediated by the school's professional culture, teacher's self-efficacy beliefs, and teachers' involvement in decision-making.

Schools as Complex Social Systems

From a practical standpoint, for school administrators, school improvement involves the complex task of clarifying which elements of a school's social system (e.g., bureaucratic structure, individual needs, shared culture, political influences, organizational goals and functions) enhance or undermine general school performance (Rossman, Corbett, & Firestone, 1988; Hoy & Miskel, 1996). Social systems theory has been useful for understanding schools as complex organizations. The theory has provided a conceptual framework for understanding the reciprocal nature of and dynamics involving individual and group interactions within their environment.

Getzels (1980) initiated a series of conceptual models that have been used to explain human behavior in organizations. His discussion of *core values,* which constitute stable ideals and beliefs and *transient secular values*, which are subject to change demonstrate the dynamic nature of the schooling process (Lipham, 1988). His original psycho-sociological framework helped produce several subsequent conceptual models (e.g., Getzels, 1952; Getzels & Guba, 1957; Getzels-Thelan, 1960; Getzels 1978) that explain the reciprocal functions of a variety of dimensions involving human personality, formal and informal organizational roles, communities, and the sources of and reactions to change (Lipham, 1988). Getzels social systems models have also proven useful for their "attention to the [symbiotic] relationship of the school to its larger environment and the impact of cultural and individual values on the operation of the school" (Lipham, 1988, p.178).

Social systems theory explains human behavior in organizations as a result of the interplay between the roles and expectations of the institution (nomothetic

dimension) and the needs and dispositions of the individuals (idiographic dimension) in them. Organizational outcomes are understood as mediated by the degree to which nomothetic and idiographic dimensions converge and thus contribute to or challenge values held by the individual (Owens, 1991). In addition, schools are depicted as responsive subsystems of an external environment (i.e., an open system) and illuminates the importance of quality communication systems and decision-making processes (Owens, 1991).

The next section explains why, in the quest for school improvement, school administrators must understand and anticipate the effects of change processes and a myriad of conditions that are created when attempting to initiate change (i.e., improvements).

Educational Change Processes

Some educational scholars have documented growing discontent among teachers with the cyclical nature of education reforms that target improvements in the performance of teachers, students, and school leadership (Cuban, 1990; Murphy, 1990; Darling-Hammond, 1993). It would be speculative, at best, to solely attribute the cycle of ongoing reforms to the quality of school innovations. Instead, McLaughlin (1998) has explained that failed reforms, in part, are the result of the failure to understand and account for change processes at the forefront of reforms that are designed to make improvements. It is this lack of understanding about the effects of change processes that not only leaves innovations vulnerable to political pressures, but also compromises the fidelity and effectiveness of proposed ideas. Therefore, the principles which guide an individual's choices and strategies selected

to bring about improvements are not only central to a theory of change (Cusik, 1993), but also central to goal attainment.

Early discussions of change (e.g., Heraclitus philosopher in 500 B.C.) as a phenomenon suggest it to be reflective of "mental perspectives... about apparent differences" (Blackburn, 1994 p. 61; Barott & Raybould, 1998). Generally speaking then, perceptions of the individual act as preliminary signals which are used to make critical decisions about whether to interact with, accept, reject, or absorb proposed ideas (e.g., see Astuto & Clarke, 1985; Hord, Rutherford, Huling-Austin, Hall, 1987; Wimpelberg, Teddlie & Stringer, 1989; Darling-Hammond, 1990; Fullan, 1990; 1993; Teddlie, 1993; Chauvin, 1993; Loup, 1994; Fullan, 1997; Clarke, 1997). From this line of reasoning it is clear that individuals responsible for bringing about change not only decide the degree to which goals will be accomplished, but also express certain reactions to those goals. Michael Fullan (1997, p. 54) explains that any attempt to bring about change should be prefaced by the knowledge about:

a) expected reactions to change by individuals;

b) essential reactions needed for program success (shifts in beliefs, values, norms etc.) at the organizational level when applicable; and,

c) "unanticipated events" that "are a normal part of the scene."

Authorities have clarified that failure to address concerns of the individuals responsible for carrying out goals and objectives may be responsible for derailed reform efforts (Fullan, 1993; McLauglin, 1998; Hord, 1987).

Conceptual models used to understand change have evolved over time and include its management, facilitation, and maintenance (e.g., Hord, 1987; Loup, 1994). These models have been useful for the insight they have provided on how to deal with the effects of change. In addition, conceptions of resistance and receptivity to change are no longer conceived of as problematic, rather they have come to be expected as normal reactions and essential clues for resolving potentially contentious issues (Hord, 1987; Cusik, 1992; Fullan, 1993; Fullan, 1998). Of importance to this study has been the shift in conceptions of change as an ongoing process, not an outcome.

A final, but important aspect of change processes that is linked to the pressures of accountability systems is the need for sufficient amounts of time (e.g., three to five years) for establishing the conditions for producing goals (Cuban, 1988; Fullan, 1993; Weller & Weller, 1997; Ellett, 1997; Fuhrman, 1999). Reform efforts that include expectations for quick results are exasperating to implement at all organizational levels. Criticism of cycling reform efforts that target quick cures for educational ills is grounded in experience with hampered motivation and unstable educational environments that are focused more on attainment of resources and funding, rather than on goals of improvement. The ideas of schools as complex social systems and change as an ongoing process provide a sound framework for thinking about linkages to school effectiveness in terms of processes. The next sections discuss elements of the schools' professional culture, teachers' self-efficacy beliefs, and participation in decision-making as mediating processes linked to school effectiveness.

School Culture

The definition of culture typically used in educational administration has been borrowed from the study of organizational behavior (Firestone & Louis, 1999). Edgar Schein, for example, described culture as, "a pattern of shared basic assumptions that the group learned as it solved problems... that have worked well enough over time to be considered valid...and the correct way to perceive, think, and feel in relation to those problems (in Firestone & Louis, 1999, p. 218)."

School culture has also been discussed in terms of the interpersonal interactions and perceptions held by individuals, their shared beliefs, attitudes, and values; expectations; cohesion; human caring and sharing; and, shared power (Krober, 1952, Fullan, 1993, Newman & Associates, 1996, Cavanagh, 1997, and Donahoe, 1993 in Cavanagh, et al., 1998; Deal & Peterson, 1999). These dimensions have been documented as highly related to student learning (McLaughlin, 1995; Newmann & Associates, 1996, Sammons, Thomas, & Mortimore, 1995 in Cavanagh, 1998). However, there remains the need for more information about *how* dynamic processes within schools bring about meaningful and sustained positive change (see e.g., see Erikson, 1987; Cuban, 1990; Fullan, 1993; Hargreaves, 1995; Lebow & Simon, 1997).

Past research on dimensions of culture has been grounded in the fields of anthropology, social science, and psychology (Bandura, 1997). However, one of the most pervasive issues emerging from the study of organizations has been distinguishing between organizational culture and climate. Hoy, Tarter, and Kottkamp (1991) have defined *climate* as a psychological element and *culture* as an anthropological element (Freiburg & Stein, 1999). Other research has made

distinctions between climate and culture of the organization using perspectives of ecology, milieu, social systems, and culture (i.e., belief systems and values) at both the school and classroom levels (Creemers & Reezigt, 1999). Hoy and Feldman (1999) have suggested that school culture be understood as shared assumptions, values, and norms, while shared perceptions of behavior constitute school climate (p.84).

Both culture and climate can be utilized to capture the essence of organizational effectiveness as well as the behaviors of individuals. Researchers, for example, have found that the *perceptions of shared behavior* (climate) are easier to examine than are *assumptions, norms, and values* of the individual (culture), though admittedly the "conceptual step" between these two ideas is dubious (Hoy & Feldman, 1999, p.85). Defining the quality of schools using direct and indirect measures of school climate, ongoing assessment of the school's health, and sustaining educational progress requires continuous monitoring and adaptation (Hoy & Miskel, 1996; Hoy & Feldman, 1999).

Deal and Peterson (1999) have reiterated observations of sociologist Willard Waller who wrote in 1932 about the uniqueness of school culture. It is the uniqueness of school culture that increases the value for additional empirical research. Generalizations from a few classic studies have only touched the surface on what is to be learned from this line of inquiry. Pervading questions related to school culture are concerned with how shared norms, values, and assumptions are measured, their intensity, whether a basic or multiple cultures exists, and the level of impact covert and overt cultures have on schools (Hoy & Feldman, 1999).

While past research that has examined school culture has been important, the approach utilized has targeted the traits and roles of the principal. This has provided only a fragment of the information that is needed to understand how to make positive changes in the school's culture. Changing schools, for example, has been attributed to the principal's leadership (Hall & George, 1999). Firestone and Louis (1999, p. 297) have pointed out how the business sector, vis-à-vis *In Search of Excellence* (Peters & Waterman, 1982), *Corporate Cultures* (Deal & Kennedy, 1982) and *Theory Z*, (Ouchi, 1981) influenced the focus of studies in educational administration to concentrate on the role of the principal. However, new conceptions discuss shared responsibility, leadership density, and the positive effects of an environment in which everyone is actively engaged in the process of schooling (Sergiovanni, 1990; Ellett, 1994; Smith and Ellett, 1999).

There have been some studies from the field of educational administration that have explored linkages between school success (as defined by student performance and perceived as a sense of excellence) and restructuring the professional environment (Holland, 1993; Cavanagh, 1997; Oettingen in Bandura, 1997; Deal & Peterson, 1999, p. 6). Yet, more are needed that examine the culturally embedded nature of the professional environment and its association with school effectiveness.

While the importance of school culture and its relationship to school effectiveness may still be somewhat intuitive at this point, there has been a demand for new information on school culture that has been grounded in both theory and research (Deal & Peterson, 1999; Louis & Firestone, in Louis & Murphy, 1999). Cavanagh (1997) examined elements of school culture and found that effective

schools tend to reflect an embedded sense of professionalism and that their classrooms reflected an "interrelated social group formed to facilitate teaching" (Cavanagh, Dellar & Ellett, 1998, p. 6).

The present study builds upon the original work of Cavanagh and upon his initial conceptual linkages that tie the schools' professional culture to school effectiveness. The study also examined teacher self-efficacy beliefs, which are tied to personal judgments about ones' own capability to teach effectively. The next section provides an overview of this theory.

Teacher Self-Efficacy Beliefs

Self-efficacy theory, originated from the work of Albert Bandura (1977), and represents a belief system that involves an individual's motivation, persistence, and feelings of competency. Grounded in social cognitive theory, self-efficacy is defined as personal beliefs "in one's capabilities to organize and execute the courses of action required to produce given attainments (Bandura, 1997, p. 3). These beliefs are influenced through four important sources for information: personal mastery experiences, verbal persuasion, physiological arousal, and vicarious learning. Self-efficacy represents a sub-theory of social cognitive learning theory and is presented by Bandura (1997) as triadic reciprocal causation model involving the environment, internal personal beliefs, and behavior.

The theory of self-efficacy has appeal in educational administration for its versatility. For instance, the theory provides conceptual distinctions between personal beliefs that *a certain behavior will produce* an outcome (outcome expectancy) from personal beliefs that *a behavior can be produced* (efficacy expectation). It is also useful for explaining how one's personal beliefs act to

influence the behavior of others and is influenced by the beliefs of others (via sources that can either create doubt or feelings of competence) (Bandura, 1977, p. 193; Bandura, 1997).

Finally, the theory of self-efficacy clarifies that there exists the possibility that a person can be highly efficacious in their ability to carry out one task, yet have serious doubts about their ability to carry out others. For example, if circumstances differ, these doubts can emerge even when carrying out a task performed successfully in the past. Bandura states that success on one occasion does not translate into beliefs of success on every occasion the same task is attempted. (Bandura, 1997). For the purposes of attaining the goals of accountability and high stakes testing, a teacher's belief that a behavior can raise student achievement differs from beliefs that they can repeatedly produce the behavior needed.

Self-efficacy is a contextually bound belief system and has been used in a number of task specific studies in fields of sociology, anthropology, and medicine (Tshannan-Moran, Hoy & Hoy, 1999; Bandura, 1997). The findings from these areas of study indicate that beliefs of individuals in their abilities to succeed on specific tasks are directly related to the success of their efforts. Understanding the reciprocal effects of personal beliefs systems and their linkage to school outcomes make the concept of self-efficacy not only a new avenue of study in education, but also a new avenue for school improvement.

Evolution of Teacher Self-Efficacy Research

Most of the literature that describes the evolution of teacher self-efficacy measures begins with an explanation of a 1976 RAND study where teacher efficacy was first examined in selected Los Angeles schools (Armor et al, 1976). Teacher

efficacy during this early exploration was grounded in Rotter's (1966) measures of internal and external locus of control (Tschannen-Moran, Hoy & Hoy, 1998). The initial RAND study findings, which were based on two items, suggested there was a significant relationship between teacher efficacy and student achievement. These findings resulted in a number of subsequent measures that define teacher efficacy using the two original items based on Rotter's *locus of control* theory (Gibson & Dembo, 1983; Woolfolk, Rosoff, & Hoy, 1990; Watson, 1991; Moore & Esselman, 1992; Guskey & Passero, 1994; Ross, 1995, Schwarzer, Schmitz, & Daytner, 1999; Pajares, 1999). Teacher efficacy has been examined by a number of researchers using both qualitative and quantitative methods (Ashton & Webb, 1985; Rosenholtz, 1989; Lee et al, 1991; Moore & Esselman, 1992; Hoy & Woolfolk, 1993; Loup, 1994; Hipp & Bredeson, 1995; Chester & Beaudin, 1996). In fact, Tshannan-Moran, Hoy, & Hoy (1998) have provided a succinct summary of past findings, all of which suggest teacher efficacy as a possible mediating factor of the schools' climate, leadership, sense of community, decision making, role demands, morale, as well as lack of recognition and professional isolation. An unfortunate problem however is the lack of a theoretically sound foundation upon which these numerous measures have been built.

The goals of accountability and high stakes testing involve raising student achievement scores. Shared responsibility for achieving these kinds of results includes the teacher's response to top-down pressures for change (Darling-Hammond, 1993; Fullan, 1991). In this study, the teacher's personal beliefs in the effectiveness of their own teaching is believed to mediate their decisions in ways that effect student learning. Because not all beliefs, values, and assumptions are

shared (e.g., subcultures) the school's culture provides multiple contexts in which teachers' self-efficacy beliefs and thus, the level of their motivation, determination, persistence, and feelings of personal competency are supported or threatened.

A major change agent is the teacher who is morally committed to the goals of accountability and high stakes testing (Fullan, 1993; Fullan, 1997). The next section introduces advancements in what is known about the effects of shared decision-making and its linkage to school effectiveness.

Decision Making

Research on the effectiveness of *shared* decision-making has shown that positive results from participation are conditional (Coch & French, 1948, Vroom & Jago, 1978, Saaty, 1982; Hoy & Tarter, 1995). For example, an important caveat in the research was that positive results were linked to participants who were personally concerned, competent, and generally committed to the desired goals (March, 1994; Hoy & Miskel, 1996). Dimensions have been defined as salience (e.g., personally relevant), efficacy (e.g., beliefs that an impact will be made) and efficiency (e.g., no better alternatives exist) (March, 1994, p. 164).

The reaction of teachers to, and their acceptance of, the goals and strategies selected for bringing them about are central to goal attainment (Cuban, 1990; Darling-Hammond, 1993; Fullan, 1993). Teachers need a sense of belonging, ownership, and *buy-in* in order to attain goals (Hodgetts, 1990). Teachers that have been involved in decisions of how to bring about those goals for which they are held most accountable are more likely to facilitate the changes needed (Fullan, 1993; Fullan, 1997).

Alutto and Belasco (1972) developed a measure of actual and desired levels of participation in decision-making that defines three conditions of involvement: saturation, a match, and deprivation. Saturation occurs when the teacher is more involved than desired. A match occurs when teachers are as involved as they believe they need and desire to be. Deprivation occurs when teachers are not as involved as they believe they need to be. Subsequent research using this conception has identified decision-making as a multidimensional construct involving both personal and organizational dimensions in both operational and strategic tasks (Mohrman, Cooke, & Mohrman, 1978; Bacharach, Bamberger, Conley, & Bauer, 1990; Taylor & Bogotch, 1994; Johnson & Ellett, 1995).

A number of other researchers have examined decision-making within the context of the organizational structure and find that teachers in more effective schools preferred a decentralized decision- making structure (MacKay, 1964; Anderson, 1971; Stewart, 1978; Mott, 1972; Miskel, Feverly, & Stewart 1979; Ellett & Logan, 1990). Centralized decision-making structures, on the other hand, were highly correlated with teacher job dissatisfaction, anxiety, and reduced teacher loyality and commitment (e.g., Carpenter,1971; Gerhardt, 1971; Grassie & Carss, 1973; Ratsoy, 1973; Bishop & George, 1973; Hoy, Newland, & Blazovsky, 1977 in Johnson, 1991). Taylor and Bogotch (1994) explained that teacher collaborative decision making is often found in effective schools (e.g., Rutter et. al, 1979; McCormack-Larkin, 1985; and Casnes-Lotto, 1987). There are number of studies that document the effectiveness of school restructuring efforts to include teachers in key leadership and decision making roles (Goldring & Rallis, 1993; Murphy & Joseph, 1991 in Odden, 1995). Some research suggests that teachers who are more

involved in professional activities feel more rewarded and professionally committed (Lortie, 1975; Rosenholtz, 1985, 1989; McLaughlin & Yee, 1988). This is an important link in terms of the conditions needed for success (salience, efficacy, and efficiency).

Considered collectively, the findings from past research support the notion that teacher involvement in decision-making is likely to bring about the kinds of changes needed to effect student achievement. In addition, involvement in decision making is perceived to act as a source of information used by teachers to make personal judgments about the effectiveness of their teaching abilities.

In sum, school learning environments can serve as rich resources in terms of the feedback conveyed and used by teachers to make personal judgements about their own teaching competency. This study examined the linkages among the school's professional culture, teacher self-efficacy beliefs, involvement decision-making and school effectiveness within the contexts of poverty and existing school performance.

Conceptual Framework

This study proposed a conception of schooling that envisions schools as complex social organizations, change as an embedded ongoing process, and school effectiveness as mediated by personal belief systems of teachers, the school's professional culture, and teacher involvement in decision making (see Figure 1). The conceptual model used to guide the study incorporates the effects of demographic variables as attributing to the mindset of students and perhaps some teachers in terms of student's capabilities to learn and excel. School effectiveness is understood not only as an outcome, but also as a source of information used by

individuals to make ongoing adjustments in beliefs, values, and assumptions that drive future decisions and behavior. The arrows in the model reflect the reciprocity

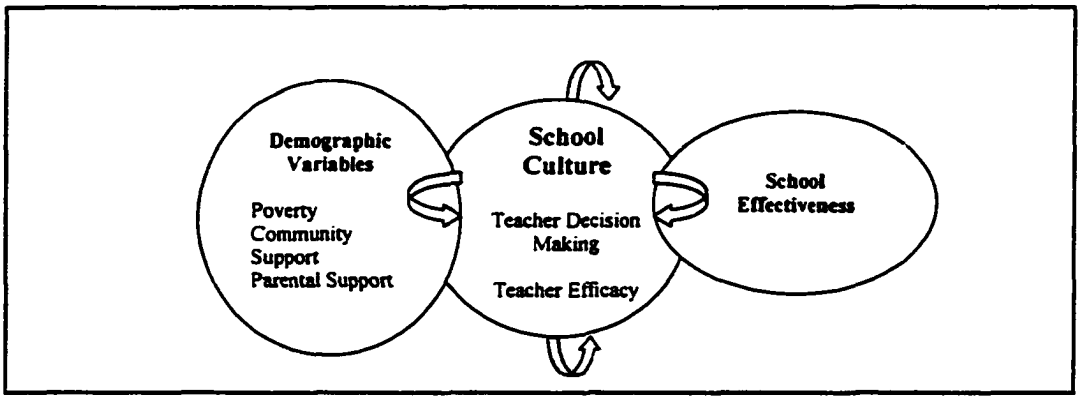

Figure 1. Model of Schooling Processes and Reciprocity of Influence

of dynamic processes embedded within the schools' unique culture. These processes serve to mediate the beliefs and behaviors of individuals within the school environment.

A number of studies have shown that poverty accounts for the greatest degree of variation in student achievement. This study examined whether school effectiveness could be understood as being mediated by the schools' professional culture, teacher participation in decision-making, and teachers' self-efficacy beliefs. If so, these dimensions may provide new conceptions about interventions for disadvantaged students.

Prior studies have indicated a linkage between teacher self-efficacy and student achievement. In addition, it is known that teacher participation in bottom up strategies is an important element of successful educational reform. However, the linkage between decision-making and sustained school effectiveness is unclear. For this reason, teachers' involvement in decision-making and self-efficacy beliefs was

understood as latent process dimensions embedded within the schools' professional culture. Schools with a strong professional culture instill a sense of shared leadership and vision, professional commitment, and provide support for collegial teaching and learning practices. Reciprocally, the opportunities provided for professional involvement in decision-making influence the personal belief systems by informing the individual of their competency to help bring about goals.

Problem Statement

Several problems were addressed in this study. One problem brought to light by the National Policy Board for Educational Administration was the relatively recent inclusion of societal and cultural influences on schooling as one of seven general categories of essential knowledge for educational administrators in 1989 (Donmoyer, 1999). The need for additional studies that examine the relationships between school culture and school effectiveness was addressed in this study.

A second problem addressed in the present study was that there are no known studies that examine how the study variables are related to school effectiveness or how they differ between high and low performing schools.

A third problem addressed by the study was that there are no known studies that examine (in combination) the study variables, and their linkages to school effectiveness in demonstrably effective and ineffective schools using mixed methods of research.

Purpose of the Study

The purposes of this study were fourfold: 1) to develop a conceptual model that could be used to understand and explain the mediating effects of school culture, teacher self-efficacy beliefs, and participation in decision making on school

effectiveness; 2) to develop measures that were aligned with theory and frameworks used to describe the study dimensions; 3) to explore the characteristics of the new measures (e.g., reliability of the data, factor structure etc.); and 4) to examine how the variables in combination might be used to differentiate effective and ineffective schools using quantitative and qualitative methods.

Importance/Significance of the Study

The importance and significance of the study can be understood from a variety of perspectives. First, the study was important and significant from a theoretical standpoint because of its integration and utilization of multiple conceptual ideas (e.g., social cognitive theory, social systems theory, self-efficacy theory, frameworks of educational change, and decision-making) and their tenets to guide explorations of teacher personal and school contextual variables. Independently, research findings have supported the importance of each theory. However, authorities find many of studies in educational administration are disjointed from the schools' larger context. This study addressed this problem by utilizing the tenets of a combination of theories to create a larger model and theoretical foundation for understanding the dynamic processes involved in schooling.

Another theoretically important and significant part of the current study was the development and use of a psychometrically sound measure of teachers' self-efficacy beliefs. Thus far, the extant research exploring teacher self-efficacy is based on measures that have been adapted from original, but conceptually flawed, measures or those with weak conceptual linkages to the actual theory of self-efficacy. The measure in this study represents careful attention to the theory and

alignment with a series of tasks tied to an existing psychometrically sound teacher evaluation.

Thirdly, the findings in this study are important and significant for their contribution to the knowledge base in educational administration by clarifying the relationships between school culture and school effectiveness. The lack of empirical research in this area was recently identified to be a problem. Most of the research related to school culture, while important, has been qualitative in nature and difficult to produce on a large scale. The measure utilized in this study explored teachers' perceptions of elements of the schools' professional culture and their linkages to school effectiveness. These elements provide new conceptions that are useful for school improvement.

Fourth, the study is important and significant because the study variables were examined using both quantitative and qualitative methodologies. In addition to verifications of the internal reliability of the data provided by quantitative explorations, the richness and trustworthiness of the study findings were enhanced by parallel qualitative explorations.

This study was important and significant from a school reform perspective. The study links the characteristics of the schools' professional culture, teachers' self-efficacy beliefs, and participation in decisions to school effectiveness within contexts of poverty. Essential information is generated and provides school administrators with new insight and direction on *how to create* more effective schools that are grounded in quality learning environments.

Conceptual/Operational Definitions

Conceptual and operational definitions of the independent and dependent variables as defined in this study are presented in this section. The conceptual definition precedes discussion of the operational definition of the study variables.

Dependent Variable

School Effectiveness

School productivity is understood as the result of personal and organizational efforts contributing to student achievement. In addition, school productivity is perceived in terms of both the quantity and quality of the outcomes valued by the organization. As such, an embedded dimension is the ability of the school to attract and keep students defined by the conception of school holding power or positive attraction (i.e., valence) (Morris, 1986; Johnson, 1991).

School effectiveness was operationalized by the School Performance Score. The Louisiana State Department of Education derives a weighted score that is made up of four indicators (New LEAP 21 Tests (criterion-referenced test, 60%), Iowa Tests (norm-referenced test, 30%), Student Attendance (10% K-6 5% for 7-12) and Dropout Rate (5% 7-12)). Scores ranged from 0 to beyond 100 and were used to academically label schools. Scores of 30 and below were deemed by the Department of Education to be academically unacceptable; scores from 100-124 represent a school of academic achievement; scores from 125-149 reflect a school of academic distinction; and scores of 150 and above reflect schools of academic excellence.

Independent Variables

Poverty

Poverty is conceptually defined in this study as conditions associated with low income and latent educational disadvantage. According to the Interagency Forum on Child and Family Statistics some of these disadvantages of poverty are manifest in the social, emotional, and intellectual development of the child. In addition, the home environment is viewed to have an effect on the child's well being in terms of their health, security, and feelings of safety. Low family income and the lack of parental access to stable employment are described as having an effect in terms of the stability of the living environment, access to health insurance, proper nutrition, and childcare. The combined, latent, effects of these disadvantages are brought in to bear as a part of the daily teaching and learning environment.

Poverty was operationalized by the percentage of the total student population on free and reduced price lunch in each school as reported by the Louisiana Department of Education.

School Culture

School culture was conceptually defined as the collective beliefs, attitudes and values held by individuals tied to perceptions of elements of the schools' professional environment (Cavanagh, 1997). The concept was used to represent perceptions of *who we are* and *what we do around here* in terms of cultural support for "learning, collegiality, shared planning" (Cavanagh, 1997, p.150). Perceptions about the value for shared visions of the schools' mission and degree to which opportunities for shared leadership are reflected. In addition, the schools' professional culture was conceived of as the degree of mutual empowerment

demonstrated by new and veteran teachers and understood as a collegial teaching and learning environment. The beliefs, norms, and values for professional commitment and degree of effort expended on behalf of the school and student learning are also conceptually represented. Definitions of the school culture dimensions can be found in Appendix B.

School culture was operationalized by the Revised School Culture Elements Questionnaire Short Form (RSCEQ-S) (Bobbett, Oliver, & Ellett, 2000). Subscales measured included: Shared Leadership and Vision, Professional Commitment, and the Collegial Teaching and Learning.

Teachers' Self-Efficacy Beliefs

Using social cognitive theory as a foundation, teachers' self-efficacy beliefs were conceptually defined as one's personal belief system. Such belief systems are made up of both cognitive (e.g., beliefs, values, and assumptions) and affective (e.g., persistence, competency, skill) components according to the theory. Self-efficacy has been defined as "beliefs in one's capabilities to organize and execute courses of action required to produce given attainments (Bandura, 1997, p.3). According to the theory, belief systems of the individual determine the courses of action they pursue. Bandura developed a Triadic Reciprocal Causation Model, to explain that human agency (e.g., motivation, behaviors, decisions) operates generatively and proactively, not just reactively (Bandura, 1997, p. 3). More specifically, self-efficacy beliefs regulate behaviors in terms of 1) the degree of initial effort and task persistence; 2) persistence in face of uncertainty and in overcoming obstacles and/or barriers; and, 3) the willingness to pursue future goals in spite of repeated failure (Bandura, 1977, 1997; Loup, 1994). Stronger efficacy is

linked to proactive efforts that are sustained in the face of failure and are grounded in beliefs that at some point, goals can be attained and tasks can be successfully accomplished. Four dimensions of teaching and learning effectiveness were explored: classroom management, communication/clarification, accommodating individual learning differences, and instilling higher order thinking skills. The series of tasks linked to teachers' self-efficacy beliefs can be found in Appendix C.

Teacher self-efficacy was operationalized by the Teacher Efficacy Beliefs Scale Short Form (TEBS-S) (Bobbett, Dellinger, Olivier, & Ellett, 1999). The TEBS-S is a measure of teachers' personal beliefs in their capabilities to carry out a series of tasks tied to effective teaching and learning.

Teacher Decision-Making

Decision-making was conceptually defined as both cognitive (beliefs) and affective (participation and involvement) processes that represent the degree to which teachers believe they currently have opportunities and should have opportunities to make decisions at the school level. As an active cognitive process, decision-making represents the amount of involvement that is exercised by teachers. As an affective process, decision-making refers to the value for and commitment to the activities and/or goals to be acted upon. Dimensions of decision-making examined include those involving the core technology (what and how to teach), operations and management, and working setting/context (where and who to teach). Definitions of the TDMS dimensions can be found in Appendix D.

Decision-making was operationally defined by the Teacher Decision-Making Scale (TDMS) measure of teacher actual (have opportunity) and desired (should have opportunity) levels of decision-making relative to a series of activities that

represent how and what to teach, fiscal and budgetary decisions, and who and where to teach (Alutto-Belasco, 1973; Conway, 1976; Mohrman, Cooks & Mohrman, 1978; Bacharach, Bamberger, Conley, & Bauer, 1990).

Teacher Decision Making Deprivation

Effective decision-making structures are said to involve teachers in bottom up activities, provide opportunities for professional input, and support their professional growth. Teacher decision-making deprivation was conceptually defined in this study as a need state that is reflected by the difference between the teachers perceptions of actual opportunities they *have* to participate in decision making (actual level) and their perceptions of the opportunities they *should have* to participate in the decision making (desired level). Teachers who have as many opportunities to participate as they believe they should have share in the decision-making process and thus experience (and report) less deprivation than do teachers who are not as involved as they desire to be.

Teacher decision-making deprivation was operationalized by the TDDS index derived by calculating the difference between teachers *have opportunity* rating and *should have opportunity* rating on a series of school level decision making opportunities (e.g., Have Opportunity- Should Have Opportunity = Deprivation Index).

Hypotheses and Research Questions

The hypotheses formulated for the study were guided by the findings in previous related studies, the conceptual frameworks explained earlier in this chapter, and explained further in Chapter Two. Research questions were generated and examined as well. The hypotheses and research questions formulated are presented

in the following two sections. The first section presents the hypotheses generated, the second section presents the subsequent research questions to be addressed in the study.

Hypotheses (H)

H_1: There is a statistically significant, positive bivariate relationship between the Revised School Culture Elements Questionnaire-Short Form and the School Performance Score.

Shared leadership and vision, collegial teaching and learning environment, and teacher professional commitment have been linked to higher student academic achievement (Wang, Haertel, & Walberg, 1993; Cavanagh, 1997). School cultures that support the professional growth and development of the teachers provide opportunities that empower teachers in ways that strengthen their professional commitment and their desire to be involved in collegial environments that providing ongoing opportunities for learning. This type of professional culture is believed to permeate into the classroom, thus developing the capabilities of students to achieve in like manner.

H_2: There is a statistically significant, positive bivariate relationship between the Teachers' Self-Efficacy Beliefs-Short Form and the School Performance Score.

A number of previous studies indicate a linkage between teacher efficacy and student academic achievement (e.g., Gibson and Dembo, 1983; Gibson & Dembo, 1984; Guskey and Passero, 1994; Parajas, 1999). However, past findings have been based on conceptually flawed measures. According to the theory of self-efficacy, behavior (B), the person (P), and the environment (E) are elements of a

dynamic system. A number of studies have found that this combination can mediate change, decisions, behavior, perceptions, learning, and ultimately school effectiveness (Wang, Haertal, & Walberg, 1993; Fullan, 1993; Fullan, 1997; Firestone & Louis, 1999; Deal & Peterson, 1999). Therefore, teachers with strong self-efficacy are as likely to be in a low performing school as in a high performing school. The hypothesis seeks to confirm the soundness of claims that link efficacy to school performance.

H_3: There is a statistically significant, bivariate relationship between the Teacher Decision-Making Scale and the School Performance Score.

The effectiveness of participation in decision making processes has been shown to be conditional (Coch & French, 1948, Vroom & Jago, 1978, Saaty, 1982; Hoy & Tarter, 1995). For participation to be an effective strategy, participants must be personally concerned, competent, and generally committed to the desired goals (March, 1994; Hoy & Miskel, 1996). Process dimensions of decision-making that have been linked to positive outcomes include salience (e.g., personal relevance), efficacy (e.g., beliefs that an impact will be made) and efficiency (e.g., no better alternatives exist) (March, 1994, p. 164). A number of independent prior studies have indicated that involving competent, interested teachers in decision making improves school effectiveness (e.g., Coch & French, 1948, Vroom & Jago, 1978, Saaty, 1982; Janis, 1979; Johnson, 1991; Hoy & Tarter, 1995).

H_4: There is a statistically significant, negative bivariate relationship between the Teacher Decision-Making Deprivation Scale and the School Performance Score.

The U.S. Department of Education has indicated that school effectiveness is linked to long-term strategic plans to involve teachers in decisions for which they were responsible (i.e., raising student achievement). Therefore, an inverse relationship was expected between the deprivation index and school performance scores as a result of teacher desires to participate being met and as a result of their involvement in the strategies selected to bring about positive results.

H_5: There are statistically significant, multivariate relationships among the subscales of the school's professional culture (RSCEQ-S), the teacher self-efficacy (TEBS-S), decision-making (TDMS), and decision-making deprivation (TDDS) and school performance scores (SPS) of elementary schools.

Prior research supports the notion that these study variables are linked to student academic achievement (Wang, Haertel, & Walberg, 1993; Cavanagh, 1997; Bandura, 1997; March, 1994). However, their conceptual and theoretical connections are unclear. The empirical/conceptual connections among the schools' professional culture (i.e., shared vision and leadership, collegial teaching and learning, and professional commitment), teachers' self-efficacy beliefs, and participation in decision-making on school performance were examined in light of past research.

H_6: There are statistically significant differences in the magnitude of teacher self-efficacy (TEBS-S), school culture (RSCEQ-S), and level of decision-making deprivation (TDDS) in the highest and lowest performing elementary schools as identified by their school performance scores (SPS).

Past research findings that show Poverty (POV) as a main indicator of school effectiveness (Edmonds, 1979; Brookover & Lezotte, 1977). This hypothesis

tests whether the study variables can explain variations beyond that typically related to poverty.

Research Questions (RQ)

Prior independent research has linked the study variables with traditional indicators of school effectiveness (Brookover & Lezotte, 1977; Edmonds, 1979; Anderson, 1982; Fevurly & Stewart, 1984; Morris, 1988; Logan & Ellett, 1989; Loup, 1994). The following research questions were used to explore whether differences or similarities could be found in terms of the schools' professional culture, teachers' self-efficacy beliefs, and participation in decision-making. The rationale for the following research questions is based on their being no known studies that have addressed this particular combination of study variables.

RQ_1: How much of the variation in school performance scores can be explained by variations in the RSCEQ-S, TEBS-S, and TDMS subscales?

RQ_2: Is there some combination of the study variables that measure teacher perceptions (i.e., about school culture, beliefs in personal capabilities, and level of involvement) that can be used to discriminate between high and low performing schools?

RQ_3: What qualitative differences in the school's professional culture exists between higher and lower performing schools that can be used to explain the level of school productivity and school holding power?

RQ_4: What qualitative differences in teacher self-efficacy beliefs exist between higher and lower performing schools that can be used to explain the level of school productivity and school holding power?

RQ_5: What qualitative differences in teacher involvement in decision making exist between higher and lower performing schools that can be used to explain the level of school productivity and school holding power?

Assumptions of the Study

The following assumptions were made in this study:

1. The self-report data collected from teacher surveys are reasonably accurate. It was assumed that respondents would consider the study important and therefore answer the questions truthfully.

Limitations of the Study

The following limitations of the study are delineated:

1. Participation in the study was voluntary. Thus, there was the potential failure to capture the perceptions of teachers who represent those that were less involved.
2. The generalizability of the results of this study was limited by the contextual nature in which the study variables and differential relationships to school performance were explored.
3. Though sample size was deemed adequate for this study, limits may be placed on the generalizability of the results due to the rather small sample size.
4. Some of the relationships may be mediated by common method variance between the measures of school culture, teacher self-efficacy beliefs, decision-making and school effectiveness.
5. The study was limited by extraneous factors linked to pressures of accountability. Attempts by school administrators to buffer teachers from intrusive activities requiring more of the teacher's limited time were evident. Notes were returned from administrators expressing that teachers would not be pursued to

complete the survey. In addition, previous agreements to allow follow-up study were disregarded at the time of scheduling.

Chapter Summary

Chapter One presented an overview of the study and descriptions of conceptual and operational definitions of the study variables used. The significance of the study and statement of the problem were discussed. Hypotheses and research questions were derived and brief rationale for each was presented. The chapter also provided a summary of the assumptions and limitations of the study. Chapter Two reviews the literature utilized in developing the ideas and conceptual model generated in this study.

CHAPTER TWO: LITERATURE REVIEW

Introduction

Chapter Two provides the reader with an overview of the literature that has been integrated and used to frame the study. The overview begins with a summary of recent conceptions of educational accountability and its role in school effectiveness. Included is a summary of pertinent frameworks used to describe schools as social organizations and educational change as an ongoing process and their functions to provide educational quality. A more in-depth discussion of the transformations in school effectiveness research precedes the summary of findings from the research and literature that describe the schools' professional culture, teachers' self-efficacy beliefs, and involvement in decision-making.

Of interest in this study were the conceptual linkages among the socioeconomic status of the student population, school performance, and differences in teachers' perceptions as profiled by the schools' professional culture, teachers' self-efficacy beliefs, and decision-making (e.g., Bandura, 1979; 1997; March, 1994; Cavanagh, 1997). The combination of theories and frameworks envision schools as complex social organizations (e.g., Getzels & Guba, 1957), change as an ongoing process (e.g., Fullan, 1991), and the school environment as a reflection of ongoing social interactions and learning (Getzels & Guba, 1957; Bandura, 1979).

A comprehensive, but preliminary search for relevant journal articles and research was undertaken. The use of the ERIC: Current Index to Journals in Education (CIJE), Education Policy Analysis Archives, INFOTRAC SearchBank via the Louisiana On Line Access (LOLA) and LOUIS databases, U.S. Department

of Education, Louisiana Department of Education, and a number of unpublished dissertations studies were helpful in framing this study.

Current Era of Accountability

Accountability and school improvement trends sweeping the nation have motivated nearly every state to incorporate some type of system (e.g., centralization, market-approach, and or site-based decision-making) through which to improve student performance (Fuhrman, 1999). Billions of dollars have been spent nationwide to bring about the goals that target educational excellence, but these efforts have *regrettably failed* according to the newly elected President, George W. Bush. In his latest educational message, "No Child Left Behind," federal plans for education continue to hold state and local governments accountable for student achievement, but have also raised the bar for teachers, who must reach the *disadvantaged student.* Raising the academic achievement of students has been, since 1790, a continuing societal goal (see Britell, 1980), however contemporary visions present major challenges in terms of identifying particular student needs and making appropriate and effective accommodations that will bring about improvements that are measurable by traditional indicators of school effectiveness. In order to ensure that states and districts meet these new goals results are tied to rewards for improvement and sanctions for failure. The struggle to identify new dimensions of schooling that can be used to explain the variation in the academic achievement of students and target reforms that will not diminish the quality of education that has been established in a school represents an elusive search for answers (Zammuto, 1982; Mingers, 1995). The next section provides several examples of related discoveries in this area.

Accountability and Academic Achievement

Student academic achievement has been attributed to various inequities (e.g., educational level of parents, gender, and socioeconomic status). For example, some researchers have reported family background as the greatest contributor to the differences in student achievement (e.g., Coleman, 1966; Rutter, 1983; Heyneman, 1983; Griffith, 1989; Jencks, 1972; Mosteler & Moynihan, 1972). In response, various educational programs and initiatives have been implemented in an attempt to offset the needs represented. Such services however have been faulted because they do nothing to address the long term needs (e.g., higher order thinking skills) that could potentially break through cycles of some behaviors that create disadvantaged conditions (Owen, 1991). A dual problem for teachers is to identify the disadvantage, then determine the courses of actions needed to correct for the disadvantage identified.

Though much study has been done on the linkages between student achievement scores and various strategies to raise them, these results have not produced the research based needed to develop innovations that have been shown to actually work (Richards, in Bliss, Firestone & Richards, 1991). As a result of the complexities introduced by changing demographic conditions, that is well beyond the control of the classroom teacher, there are strong perceptions that given the circumstances surrounding this population, efforts to reach disadvantaged students will be fruitless. This belief is grounded in a long history of past failed attempts to close achievement gaps that despite extensive efforts and billions spent has apparently worsened. One explanation may be, in part, due to an over dependence on management and/or access to effective leadership strategies to lead the way

(Richards, 1991). Though important of course, effective leadership is conceived of as a complex process contributing to, but not solely responsible for school improvement or student achievement (Sergiovanni, 1990; 2000; Ellett, 1994).

The unique and changing contexts into which and from which schools evolve presents problems for the school administrator as well as the teacher. The complexities of the schooling process introduce dynamic conditions that require ongoing monitoring of conditions that may warrant technical, philosophical, political, and/or cultural (e.g., as discussed by Rossman, Corbett, & Firestone, 1988) change.

The apparent federal focus on improving the performances of disadvantaged students challenge old conceptions about the realm of control that can be exercised by those working in the schools' organization. For this reason, it is important to understand more about how the schools' culture perpetuates and/or reduces achievement gaps. Some of the factors to which President Bush attributes achievement gaps to include low expectations, illiteracy, and self-doubt; but there is reason to believe that other related factors may be helpful to examine as well. Before other these other viable factors are discussed, it is relevant to discuss the Louisiana accountability system that is pertinent to this study of elementary schools.

Louisiana's Accountability System

State officials recently implemented the Louisiana School and District Accountability System as a mechanism for holding school administrators accountable for school outcomes. The state's model provides assistance to low performing schools through District Assistance Teams (DATs). DATs were comprised of trained state and local officials who observe and monitor the behavior

of individuals, school conditions, and who survey principals, teachers, students, and custodians as part of an overall strategy to target needs and supply resources. In addition, preliminary state plans included a source of parental relief by allowing the relocation of their children who attend schools labeled academically unacceptable. How these labels are determined is discussed next.

For the purposes of this study, the school performance score developed as a part of the accountability system was used to indicate the level of school effectiveness. Performance scores reflected four traditional indicators attributed to school effectiveness: 1) Norm-referenced tests, 2) Criterion-referenced tests, 3) student-attendance, and 4)student drop-out rate (not relevant for this study). Each school's individual performance score was computed and represents a weighted index made up of four indicators (New LEAP 21 Tests (criterion-referenced test, 60%), Iowa Tests (norm-referenced test, 30%), Student Attendance (10% K-6 5% for 7-12) and Dropout Rate (5% 7-12)). Scores ranged from 0 to beyond 150 and, as previously mentioned were used to label the academic performance of schools. Six categories were used to reflect the range in school performance scores:

1) scores of 30 and below were deemed Academically Unacceptable,
2) scores below the mean were Academically Below Average,
3) scores above the mean, up to 100 were Academically Above Average,
4) scores from 100-124 were Schools of Academic Achievement,
5) scores from 125-149 reflected Schools of Academic Distinction, and
6) scores of 150 were labeled Schools of Academic Excellence.

It should be noted that due to the configuration of scores results cannot be concluded to mean the same thing in terms of performance across schools. For

example, school improvement strategies in one school may be attributed to increased attendance, while improvement in another school may be attributed to academic achievement.

The demands for accountability have helped to establish systems that provide the motivation needed to initiate changes at the state and local levels that are hoped will bring about the desirable goals of education (Fuhrman, 1999). The demands for effectiveness require organizational structures that support the activities required to bring about those goals (Rowan & Miskel, in Murphy & Louis, 1999). The combination of initiating and supporting activities that are linked to successful goal attainment represent a multi-level process through which many innovations never complete to fruition (Nakamura & Smallwood, 1980). In order to become institutionalized (i.e., an established way of operating) the activities initiated and supported must shift from being externally imposed requirements and targets to being internally accepted and aligned with the beliefs and values of the individuals who carry them out. This study is grounded in theoretically-based conceptions of schools as complex social organizations and frameworks that historically present the idea of change as an ongoing dynamic process involving the individual and the organization (Getzels & Guba, 1957; Giaquinta, 1973; Loup, 1994; Clarke, 1997). These ideas are presented in the following section.

Schools as Organizations

Getzels and Guba's (1957) Social Systems Theory was useful for understanding schools as complex social systems. This theory provided an instrumental framework for understanding the interplay among various psychosociological frameworks. Three prevalent themes identified using the theory

were: 1) complex human personality, 2) analysis of formal and informal roles, and 3) description, formation, and expression of individual and group values (Lipham, 1988, p. 171). Getzels theory supports research that examines the functions of the school's bureaucratic structure, individual needs, shared culture, political influences and organizational goals (Hoy & Miskel, 1996). The implied interdependent nature of these aspects reflects a dynamic nature to the schooling process.

Social systems describe the dynamics as having a nomothetic dimension (i.e., institution, roles, and role expectations) and idiographic dimension (i.e., individual, personality, and need dispositions) responsible for the behaviors observed (Lipham, 1988; Owens, 1991). In 1960, the Getzels-Thelan model expanded the idea to help understand the classroom as a social system. In this later model classrooms were understood to involve interrelated dimensions (including ethos, mores, and values...) that result in goal behavior (Lipham, 1988).

Getzels model for studying behavior in a social system, B=f (RXP), where B is observed behavior, R is the institutional role, and P is the personality of the individual includes other salient factors a central one being culture (Getzels, 1968, p.102). Through the work that distinguished between stable "sacred" (e.g., democracy, individualism, equality, and human perfectibility) and transient "secular" values (e.g., work-success ethic, future-time orientation, independence, and Puritan morality) it is apparent that changes in the culture are possible but also are inner conflicts (Getzels, 1968; Lipham, 1988 p. 177). Getzels' social systems theory captured the importance of the processes involving dynamic human interactions and conditions that stimulate the potential for change and growth within

a school system (e.g., via emergent and traditional values) as well as the potential for conflicting values (1968).

More recent ideas about social systems indicate that "people are both the producer and product of social systems" (Bandura, 1997, p. 6). The causal structure defined by Bandura represents three determinants where B= is observed behavior, P= internal personal factors (e.g., cognitive, affective, and biological events), and E= external environment events are reciprocal and do not interact equally on all occasions. According to Bandura, human adaptation and change are rooted in social systems and that the psychological factors cannot be fully understood apart from structural factors (1997).

Understanding the ongoing nature of schooling and creating the capacity to resolve problems are important aspects of education (Odden, 1995). Theoretical perspectives about the processes and components of social systems that include human and organizational behavior are helpful toward that end. A related process involves the principles and strategies that are used by individuals to bring about the goals of education. This process represents ongoing aspects of change within complex social systems. The next section provides a review of the change literature and a discussion of what change means for schools within the context of accountability.

Educational Change

McLaughlin (1998) explained that failure to understand and account for change processes at the forefront of research design have left many innovations vulnerable to political pressures and has compromised both the fidelity and effectiveness of proposed ideas. The success of educational reforms depends upon

whether individuals appreciate the value for the proposed changes. Fullan (1997, p.54) has suggested that understanding change processes includes:

a) expected reactions to change by individuals;

b) essential reactions needed for program success (shifts in beliefs, values, norms etc.) at the organizational level when applicable; and,

c) "unanticipated events" that "are a normal part of the scene."

The principles used by individuals to make choices and the strategies chosen to bring about desired goals are central to a theory of change; and thus, central to goal attainment (Cusik, 1993). Numerous studies have supported the importance of the individual's decision to interact with, accept, reject, or absorb proposed ideas of change (e.g., see Astuto & Clarke, 1985; Hord, Rutherford, Huling-Austin, & Hall, 1987; Wimpelberg, Teddlie & Stringer, 1989; Darling-Hammond, 1990; Fullan, 1990; 1993; Teddlie, 1993; Chauvin, 1993; Loup, 1994; Fullan, 1997; Clarke, 1997). In addition, numerous research findings have attributed successful change to both personal and organizational variables (see Lewin, 1947; Gross, 1968; Nakamura and Smallwood, 1980; Hord, 1987; Fullan and Stiegelbauer, 1990; Fullan, 1993; Wang, Haertel and Walberg, 1993; Hoy and Miskel, 1995 Hord, Rutherford, Huling-Austin, & Hall, 1987). Faithful implementation of proposed changes is dependent on human agency and requires that attention be given to a number of dimensions of change.

A progression of past studies have addressed issues of initiating, managing, planning, and facilitating change (Carnegie, 1936; Hall & Hord, 1987; Katzan, 1989; Deming, 1983, 1986, 1993, in Hoy & Miskel, 1996; Covey, 1996; Hey &

Moore, 1998; Astuto & Clark, 1985; Hord, Rutherford, Huling-Austin, & Hall, 1987; Wimpelberg, Teddlie & Stringer, 1989; Darling-Hammond, 1990; Fullan, 1990; 1993; Teddlie, 1993; Chauvin, 1993; Fullan, 1997; Clarke, 1997). Change is now accepted as an ongoing process. In an era of accountability, this raises the importance for leadership skills in planning for and managing the effects of change.

The Secretary of the Progressive Education Association, in 1927, argued that "an unchanging educational plan would be a denial of education itself, a repudiation of the principle of growth (Snyder, in Cubberly, 1970, p.419)." However, since those earlier days there has been growing discontent with recurrent cycles of educational reform initiatives (Cuban, 1990). Some researchers have suggested that the ineffectiveness of educational reforms may be due to their externally imposed nature (e.g., mandates, regulations and reorganization) (Cuban, 1990; Darling-Hammond, 1993; Pogrow, 1997). Implicit is the perception that effective change must be grounded in core beliefs, values, and expectations that are directed from the inside-out and not from the outside-in.

Based on findings from the change literature individuals must value the changes proposed (Cuban, 1990; Darling-Hammond, 1993). The strategies selected for raising student academic performance, for example, must be valued by teachers and supported by school administrators. Personal anxiety that is the result of teacher beliefs in their capabilities to successfully execute the activities recommended must be reduced. Anxiety may be alleviated by professional development opportunities that enhance the sense of personal mastery. The level of anxiety induced by change has been shown to affect the amount of time (e.g., two to

five years) needed for successful implementation (Hord et. al, 1987; Fullan, 1993; Haertel & Walberg, 1993).

A final component of change processes involves the conditions that affect the perception of the individuals and their decision to persist in or abandon their efforts. While change is presented in the current study as an ongoing process, dealing effectively with human and organizational dimensions has presented challenges across time. In an era of increased accountability and recent demands to raise the academic achievement of disadvantaged students not only raises the bar for teachers, but also increases the level of pressure on states and local school districts to provide the kinds of supportive environment needed to accomplish these goals. One way of finding answers is looking at what is already known about how to make schools effectiveness. The related literature is shared next.

School Effectiveness

Student academic achievement continues to be the predominant indicator used to summarize the effectiveness of schools. However, the latest research in this area indicates a shift in the definition. Research findings suggest that student-related outcomes (i.e., academic achievement) are linked to school organizational outcomes (i.e., perceptions of the academic environment) (Loup, 1994; Hoy & Miskel, 1996). Studies of organizational effectiveness have focused narrowly on structural elements which in practical terms attributes success or failure to the functional roles and resources provided, but this focus is now criticized and interest is growing for research that examines the effects of processes dimensions (Claudet, 1993).

School Effectiveness Research (SER)

Three major strands of school effectiveness research (SER) have been recently delineated as the following: School Effects Research, Effective Schools Research, and School Improvement Research (Reynolds & Teddlie, 2000). However, efforts to understand causal links between schooling and student performance in the United States have perplexed scholars and policy makers since the Committee of Gentlemen for a Liberal Education (1709) first examined the effects of teaching proficiency on student performance (Britel, 1980). Persistent investigations into the linkages between aspects of schooling and student performance document an incremental evolution of thought that has helped shape contemporary perceptions and research.

The idea that educational outcomes are a function of inputs has a long history linked to scientific management and human capital theories and is grounded conceptions that ascribed economic value to individual attributes (Cohn and Geske, 1990). Conceptually, the input-output model conveyed input as some combination of resources (human and organizational) and output as student performance on standardized tests. The economic and businesslike focus on quantifiable outcomes during the early 1970s fit well with studies that examined student characteristics including socioeconomic status (SES) and operationalized school effectiveness as measured on standardized test (Teddlie & Reynolds, 2000). In fact, the research consistently shows SES to be related to student achievement. New direction was provided during the 1980s that included new conceptions to measure the effects of process dimensions (behavioral and attitudinal).

Despite consistent statistical findings that link SES as a main factor affecting student achievement, some schools have provided conditions in which student learning by the poor tended to excel. Building upon the input-output model then, researchers began to conceive of effectiveness as a product that included the behavior and attitudes particularly of teachers. Economic studies continue to indicate inconsistent links to student achievement (Hanushek, 1986, Harp, 1994, Hanushek, 1997). School effect studies during the 1980s that explored the effects of behavior and attitudes on student achievement were proliferating and changing conceptions about quality and effectiveness.

Exemplary schools were identified as those that were effective in poor areas. These schools were used to set the standards toward which others should strive to resemble (Edmond, 1979, 1982; Purkey and Smith, 1983) (in Cohn and Geske, p.187). Various factor-formulas were used to identify areas in which change could improve student achievement (Hoy & Miskel, 1996). Effective schools research discussed the effects of strong leadership by the school principal, high expectations for students, emphasis on basic skills, orderly environments, and frequent systematic evaluations of student progress (Miskel, Fevurly, & Stewart, 1979; Miskel, Bloom, & McDonald, 1980; Hoy & Miskel, 1996). Interest shifted from describing conditions in successful schools to creating them (Teddlie and Reynolds, 2000). During this applied research phase, school context factors were not considered largely due to practical concerns about conditions beyond the control of schools. SER was eventually criticized however for its powerful influence to narrow conceptions of school improvement to standardized curriculum, textbooks,

workbooks, and teaching to the test (Cuban, 1983, 1984; Teddlie & Stringfield, 1993; Steadman, 1987 in Hoy & Miskel, 1996).

More recent conceptions in SER build upon the original input-output model by including conceptions of causal or feedback loops linked to process and context dimensions. Behavioral indices of teaching effectiveness have been linked to school effectiveness and suggest that effective teaching takes place in effective schools, and not in ineffective schools (Crone & Teddlie, 1995, Stringfield et al, 1985, Teddlie et al., 1989, Teddlie & Stringfield, 1993, Virgilio et al., 1991). Creating organizational infrastructures that support effective schools has been examined.

Expanded Perceptions of School Effectiveness

During the 1990s, W. Edwards Deming's discussed new conceptions of organizational effectiveness and framed the fourteen principles of *Total Quality Management (TQM)* (Hoy & Miskel, 1996). The message promoted by TQM and similar management plans (e.g., Stephan Covey's *7 Habits of Effective People*) introduced new conceptions of a learning organization. Human process dimensions were tied to organizational effectiveness.

Meyer and Scott (1983, 1991 in Murphy & Louis, 1999) developed a helpful typology for understanding organizational structures. These researchers identified the following four technical and institutional structures:

a) environments that demand performance (e.g., as in business);

b) those that demand institutional conformity (e.g., as in schools);

c) those that demand performance and institutional conformity (e.g., hospitals); and,

d) those with weak demands on both performance and conformity

(e.g., personal service establishments)

(Rowan & Miskel, in Murphy & Louis, 1999 p. 364).

These authors suggest that recent demands in education for both accountability and effectiveness require both conformity and higher levels of school performance which moves the general expectations for schooling into a professional standing akin to that of the medical profession (Rowan & Miskel in Murphy & Louis, 1999). It is timely that more recent explorations into the characteristics of and processes that take place within schools have provided useful conceptions and indices of school [organizational] effectiveness that can be understood in terms other than student achievement (Loup, 1993; Claudet, 1993; Johnson, 1991; Logan, 1990; Chauvin, 1992; Cavanagh, 1997; Ellett et al., 1997)

In 1972, Paul E. Mott examined organizational effectiveness in terms of goal attainment, adaptability, integration and latency (Loup, 1994; Hoy & Miskel, 1996). Hoy & Miskel, (1996) point to a growing body of empirical support (i.e., studies by Miskel, Fevurly, & Stewart, 1979; Miskel, Bloom & McDonald, 1980,1983; Hoy & Ferguson, 1983) of Mott's initial conclusion that the "subjective evaluations of employees provide a fairly valid measure of organizational effectiveness" (p. 255).

Further refinements to the measures found by Mott's (e.g., Logan, 1990, Johnson, 1991,Chauvin, 1992, Claudet, 1993, Logan, Ellett & Licata, 1993) indicated that perceived organizational effectiveness is also related to other indicators of effectiveness (e.g., structural coupling, robustness, academic achievement and student attendance). Continued study in the area of organizational effectiveness has generated further interest in the exploration and examination of the

characteristics and processes that make schools effective (Hoy & Miskel, 1996, p.255).

Case studies in effective schools research published by the National Center for Effective Schools bear out that school improvements are best viewed as unique, ongoing, processes and that site support from the central office is key to sustained positive change (Lezotte, 1990). In addition, this research suggests that important conditions are a clear mission, publicly displayed student performance data, and time to plan. Finally, surveys that examine perceptions have been found to provide a valid basis for planning and improvement. A growing body of related empirical research provides a rich source for developing alternative conceptions about school effectiveness and thus, improvement (Ellett, Logan, Claudet, Loup, Johnson, & Chauvin, 1997). This study expanded upon the findings of prior research by examining the nature of differences in school performance as measured by school culture, teacher self-efficacy, and decision making participation (Coch & French, 1948; Bandura, 1977; 1981,1986,1993,1997; Janis, 1977; Dörner, 1989; Loup, 1994; Clarke, 1997).

School Culture

The definition of culture typically used in educational administration has been borrowed from the study of organizational behavior (Firestone & Louis, 1999). Edgar Schein described culture as "a pattern of shared basic assumptions that the group learned as it solved problems...that have worked well enough over time to be considered valid...and the correct way to perceive, think, and feel in relation to those problems" (in Firestone & Louis, 1999, p. 218). Schein also defined three levels of culture: artifacts (observable), espoused values (statements about the way

things are and supposed to do), and basic assumptions (communal guidelines for how to act) (Firestone & Louis, 1999). However, school culture has also been defined as a reflection of interpersonal interactions and perceptions comprised of the norms, beliefs, attitudes, and values held by individuals (Cavanagh, 1997). Culture is also described as "an expression of expectations concerning future interactions providing [a sense of] cohesion..." (Krober, 1952; Donahoe, 1993 in Cavanagh, et al., 1998).

The need to generate information that has been grounded in both theory and extant research to explain how school culture acts as both a "process" and "component of the learning environment" has been recently indicated (Deal & Peterson, 1999; Louis & Firestone, in Louis & Murphy, 1999, p. 319). The current study is concerned with aspects of the school culture that reflect personal and group interactions, perceptions, and expectations which are important elements that have been documented to be aspects that are highly influential over student's learning (Sammons, Thomas, and Mortimore, 1995 in Cavanagh, 1998). In addition, during the development of a new measure of the school's professional culture, Cavanagh utilized the school effectiveness literature to develop conception of a culture he described as supporting the moral purpose for teachers (Cavanagh, Dellar, and Ellett, 1998). Cavanagh's combination of the content classified elements of school culture that are tied to both student learning and to core values held by teachers is an important deviation from previous examinations of culture as an organizational behavior.

There is a considerable amount of related research findings that link the following aspects to school culture: group cohesion, human caring and sharing, and

shared power (Krober, 1952, Fullan, 1993; Newmann & Associates, 1996; Cavanagh, 1997; Donahoe, 1993 in Cavanagh, et al., 1998; Deal & Peterson, 1999). The effects of personal and group interactions, perceptions, and expectations are documented as highly influential aspects over student learning (McLaughlin, 1995; Newmann & Associates, 1996; Sammons, Thomas, & Mortimore, 1995 in Cavanagh, 1998). However, changing culture requires more than merely the faithful implementation of a series of innovations or imitating behavior (Norris, 1994). In fact, the tasks involved in shaping school culture involve changing deeply embedded beliefs that are sustained by the level of actual commitment to visions that are perceived as significant to the population (Norris, 1994).

There is considerable literature to suggest that learning more about the processes through which school culture and through which subsequent meaningful change is brought about and sustained is critical (e.g., see Erikson, 1987; Cuban, 1991; Fullan, 1993; Hargreaves, 1995; Lebow & Simon, 1997). The school's professional culture provides a useful source of information and gauge for getting the things done that are known to improve schools. Another problem is that although specific studies have examined cultural differentials within the student population, none have been tied to student achievement (National Research Council, Snows, Burns, & Griffins, ed, 1998).

For the purposes of this study, Cavanagh's (1997) study provides a conceptual linkage between school culture and school effectiveness. In his research study, an effective school culture reflects professionalism and its classrooms reflect an "interrelated social group formed to facilitate teaching" (Cavanagh, Dellar & Ellett, 1998, p.6). It is timely that newly derived instruments have been created to

study school culture. Psychometric testing of the construct originally developed by Cavanagh has resulted in several replicated studies that verify the multiple dimensions of the school's professional culture.

Embedded within the school culture are other elements that reflect quality and effectiveness. Both the concepts of teacher efficacy and participation in decision-making provide related sources of information about the school environment. Teacher efficacy, is a personal belief system that reflects beliefs about the capability and determination to carry out assigned tasks. Decision-making is tied to the degree of professional and personal investment and to level of concern about innovations aimed at improving student's learning and school performance. Discussion of these two concepts follows.

Teacher Self-Efficacy Beliefs

Early theories in psychology (e.g., classical and operant) explained behavior as dual in nature conceived as stimulus-response connections where desired behavior can be shaped and the environment controlled thus increasing chances that behavior will be repeated. Edward Lee Thorndike identified behavior as the law of effect and explains human behavior in terms of its affect on the environment (Thorndike, 1898 in Chance,1999). Thorndike and numerous other psychologists that discussed various ideas about the connection between learning and human behavior (e.g., Watson, Tolerman, Hebb, and Hull) created a foundation of social-cognitive theories that have helped to clarify the processes of higher order thinking linked to both behavior and the environment. Albert Bandura (1977) began his exploration along the lines of social cognitive theory by examining the influence of self-referent phenomena (Bandura, 1993). His latest discussions elaborate on this

idea explaining it within a functionally interdependent interchange of triadic reciprocal causation (Bandura, 1986) involving behavioral, personal, and environmental elements that varies in importance (Bandura, 1997, p. 6). According to this theory, while expectations influence behavior, outcomes reciprocate by changing expectations (Bandura, 1977). This idea introduces the importance for school restructuring plans that consider the impact of constraints and resources provided vis-à-vis the subsequent social structure.

The idea of triadic reciprocal causality raises issues of personal control, self-reflective thought, alternatives available, self appraisal of ability, and the institutional freedom from coercive and punitive control (Bandura, 1997). These factors represent critical codeterminants of change and the successful implementation of reform ideas. They may manifest themselves as resistance, alienation, or any of a number of observed behaviors that are a result of personal beliefs. These beliefs are intervened, according to Bandura, through the sources of information provided. In addition, the self-referent dimension is central to understanding self-efficacy in general and consequently may limit the number of effective strategies that can be devised to enhance or manage their effects.

According to Bandura, four personal sources of information which are important to behavior include: past performances (authentic evidence of success), vicarious experiences (social comparison and self- appraisal), verbal persuasion (social influences that one has capabilities), and emotional arousal (coping strategies and focus of attention). These sources are part of an ongoing interchange that continually molds and remolds perceived self-efficacy (or notions of capability), and thus mediates the aspirations, behavioral choice, effort, and reactions displayed

by individuals (Bandura, 1997, p.4). High efficacy beliefs generally result in the expectation that certain actions will produce desired outcomes and it is these expectations that generate both effort and persistence. Failure to produce the desired result can lead to feelings of depression. On the other hand, failure for some individuals can generate even more effort. Low efficacy beliefs generally reflect an individual's doubt in their capability to produce the desired outcome. Successful past performance, even if for the same task, does not guarantee that efficacy beliefs will be high (Schwartz & Gottman, 1976). For this reason Bandura stipulates that perceived self-efficacy is a better predictor of actual performance than past successful or failed performances (1997). In other words, current beliefs subsume knowledge, skills, past decisions, past success, or past failure.

Research findings indicate that performance accomplishments produce higher and stronger efficacy expectations than do vicarious experiences alone Bandura, Adams, and Beyer, (1977). In addition, Latham and Locke, (1986) and Locke, Shaw, Saari, and Lathema, (1981), found that higher efficacy promotes (i.e., motivates) behaviors to set higher goals (Clarke, 1997). More recently, Bandura (1993) also found that perceptions that were related to the capability to promote academic success were also reinforcing (Clarke, 1997). Even more valuable are the findings that indicate people who view themselves performing efficaciously (i.e., absent even constructive criticism) experience improved efficacy and improved their performance (Dowrick, 1983 and Schunk & Hanson, 1989 in Bandura, 1997). These are important findings that should be incorporated into the domain of essential knowledge for school administrators.

Other researchers from the fields of anthropology, psychology, and marketing have stressed the importance of understanding the effects of complex behavioral dimensions expressed as attitudes, beliefs, values, and emotions (e.g., see Hebb, 1960; Tolman, 1967; Janis, 1977; Lebow & Simon, 1997; Hey & Moore, 1998; Fullan, 1998). Typically, these behavioral dimensions have been discussed within the context of overall human growth and development of the individual. The devolution of behavioral dimensions as applicable only to the individual and evidenced by the increase in empirical applications has met with some resistance within the field of educational administration (Sergiovanni, Berlingame, Coombs, & Thurston, 1992). While a teacher can be readily accepted as a nurturer and extended parent, this role redundancy is being replaced by more sophisticated views of the teacher as mediator of the intellectual development of individuals. More recent examinations of self efficacy have helped reframe the importance of social interactions and how they reflect the environment and other sources of information that mediate change, decisions, behavior, perceptions, learning, and ultimately school effectiveness (Wang, Haertal, & Walberg, 1993; Fullan, 1993; Fullan, 1997; Firestone & Louis, 1999; Deal & Peterson, 1999).

Teacher self-efficacy as measured by Loup (1993) focused on teacher beliefs about their ability to accomplish goals. The Teacher Self and Organizational Efficacy Assessment (TSOEA) reflected efficacy in terms of motivation and the level of energy expended, persistence, and the impact of failure on future efforts. The focus of the TSOEA broadened previous conceptions of efficacy that were limited to the classroom and perceived as barriers to effective teaching (e.g., (Gibson and Dembo, 1983; Gibson & Dembo, 1984; Guskey and Passero, 1994;

Parajas, 1999). Loup's exploration of teacher efficacy within organizational contexts included the daily interactions and multiple roles of teachers. Other recent examinations of teacher efficacy have viewed efficacy as the level of confidence in job skills within the teaching profession (Schwarzer, Schmitz, and Daytner, 1999). This study is grounded in the work of Albert Bandura and his ideas of the reciprocal processes involved that guide the individual decisions made.

Decision Making

In addition to the sources of information that can affect the individuals personal beliefs and subsequent decisions to continue in the face of difficulty there is another aspect of decision making. This aspect is the degree to which individuals take ownership in the goals sought and how the resources are provided that creates competent decision-makers at the school.

Previous studies have resulted in various conceptual models for understanding the processes of and strategies behind decision making at both the individual and organizational level. The evolution of models used to explain effective decision making has produced a series of related concepts, each with strengths and weaknesses. The classical model explains decision making as a rational, linear process driven by consequences, preferences, needs, and goals related to interests and power, acquiescence to complexity or devotion to moral principles respectively (Herbert Simon, 1947; Janis & Mann, 1977; Hoy & Miskel, 1996). However, the rational approach has not proven well suited for understanding complex decision making (Janis and Mann, 1977; Dörner, 1989; March, 1994; Hoy & Miskel, 1996).

Another concept for decision making developed was the simplification process, which emulates human reasoning strategies, (e.g., stereotyping, typologies, and abstracting) but a major drawback found was that reduced information made conclusions less reliable (March, 1994). Charles Lindblom (1959, 1963, 1965, 1968, 1980) and Simon (1957) outlined the muddling through and incremental decision-making strategies that were helpful for expanding the concept of decision making by acknowledging some decisions are nonlinear, and some not rational. This strategy was deemed reactive in nature and better suited for decision for which no clear goals exist or is needed, since the root causes of problems are not addressed (Janis & Mann, 1977; Hoy & Miskel, 1996).

The progression of understanding decision making led Etzioni to suggest that multiple strategies be synthesized, via scanning the entire situation, the task is then choose the most appropriate course of action (Etzioni, 1967, 1986, 1989). Regardless of the management strategy chosen, decisions were typically imparted from the top down. Growing discontent with the failure of top down management strategies to attain goals led to participative management strategies where change managers and change agents (those carrying out the tasks) would facilitate activities to bring about goals. For some, participation in decision making was a strategy to reduce resistance. Later is was learned that the this activity provided a sense of belonging and ownership (Hodgetts, 1990).

Quality circles and work teams emerged as part of a more humanistic management approach, but meant authority would be shared and managers would need to understand group dynamics. Deming's Total Quality Management and Covey's 7 Habits of Effective People represent management plans designed to

empower individuals, encourage shared responsibility for outcomes, and rebuild the moral character of those in the workplace. The research on the effectiveness of participation in the decision making process has shown positive results to be conditional (Coch & French, 1948, Vroom & Jago, 1978, Saaty, 1982; Hoy & Tarter, 1995). A caveat to participation as an effective strategy is that the participants be personally concerned, competent, and generally committed to the desired goals (March, 1994; Hoy & Miskel, 1996). Dimensions found to be related to positive outcomes of participation include salience (e.g., personally relevant), efficacy (e.g., beliefs that an impact will be made) and efficiency (e.g., no better alternatives exist) (March, 1994, p. 164).

Alutto and Belasco (1972) developed a measure of actual and desired levels of participation and defined conditions of saturation, a match, and deprivation. Subsequent studies identified decision-making as a multidimensional construct involving personal and organizational dimensions in both operational and strategic tasks (Mohrman, Cooke, & Mohrman, 1978; Bacharach, Bamberger, Conley, & Bauer, 1990; Taylor & Bogotch, 1994; Johnson & Ellett, 1995). Numerous other researchers have examined decision making within the context of the organizational structure and found that teachers in more effective schools perceived the decision making structure as decentralized (MacKay, 1964; Anderson, 1971; Stewart, 1978; Mott, 1972; Miskel, Feverly, & Stewart, 1979; Ellett & Logan, 1990). Supporting that conclusion are findings that centralized decision making structures are highly correlated with teacher job dissatisfaction, anxiety, and less teacher loyal and commitment (Carpenter, 1971; Gerhardt, 1971; Grassie & Carss, 1973; Ratsoy, 1973; Bishop & George, 1973; Hoy, Newland, & Blazovsky, 1977).

Taylor and Bogotch (1994) found that teacher collaborative decision making structures are often found in effective schools (e.g., Rutter et al, 1979; McCormack-Larkin, 1985; Casnes-Lotto, 1987). However, they did not find a direct relationship between decision making activities and school effectiveness. Given the developments in what is known about decision making, of interest in this study is *why* does it become an important process of school effectiveness and *how* can schools ensure that it is part of the strategies for school improvement.

Chapter Summary

Chapter Two presented an overview of the related literature and research. Multiple perspectives were shared that envision schools as complex social systems, change as a dynamic nonlinear process, and the implied synergism required to produce an effect. Empirical developments in the areas of school culture, teacher self-efficacy beliefs, and decision making were included. Chapter Three describes the mixed methods approach used to examine this synergistic process and the three phases of research represented by this study.

CHAPTER THREE: METHODOLOGY

Introduction

Chapter Three describes the mixed methods approach that was utilized in this study. The methodology outlines the activities in two sections. One section presents both Phase I and II (the quantitative methods) activities, while the other section presents Phase III activities (the qualitative methods). The research design, development of the measure, sampling, instrumentation, data collection, and data analyses are presented.

Research Design

The conceptual framework for this study is grounded in previous theories and empirical research that envision schools as complex social systems, change as an ongoing process, and social dynamics as mediators of school effectiveness. This study represents an ex-post facto design in which elementary schools were assigned into one of four poverty/performance groups. Two of the four groups in this design represented schools having a higher percentage of students in poverty (i.e., in the upper percentage poverty quartile). The two remaining groups represented schools having a lower percentage of students in poverty (i.e., in the lower percentage poverty quartile). These selected schools were then further ranked by the highest and lowest school performance score calculated and published by the Louisiana Department of Education in 1998.

Mixed methods (i.e., quantitative and qualitative) of research were used to examine the presumed effects of the study variables (i.e., school's professional culture, teacher's personal self-efficacy, and decision-making deprivation) on school outcomes (as measured by the school performance score). A Venn-type diagram was utilized to

conceptualize and characterize schools as complex feedback systems involving the psychosocial dynamics of individuals as measured by the study variables and their linkages to school effectiveness (see Chapter 1, Figure 1).

The study was divided into three phases. Phase I involved the development and testing of a new measure of teacher self-efficacy that explores teachers' personal belief systems relevant to their capabilities associated with effective teaching and learning (for discussion see Dellinger, Bobbett, Olivier, and Ellett, 2001). Phase II of the study involved survey administration and quantitative analysis of elements of school culture, teacher self-efficacy, and decision-making deprivation. Phase III provided independent case study explorations of teacher perceptions in two schools. Two types of case study analyses were conducted as a part of Phase III: 1) single case analysis to identify emergent themes and response patterns, and 2) cross case analyses of similarities and differences within the context of existing school performance and poverty of the student population.

Presented in the sections that follow are instrument development activities of Phase I, the sampling procedures, measures used, data collection methods, and analyses planned for Phase II (the quantitative phase) and Phase III (the case study phase). Table 3.1 summarizes the three phases of this study.

Instrument Development: Phase I

Phase I of the study involved the exploration and comparison of the differences in response patterns associated with the use of particular item stems used in measuring teacher self-efficacy. This was deemed necessary in light of numerous conceptions confounding the measure of self-efficacy. Self-efficacy as defined by Bandura

Table 3.1

Outline of the Research Methodology for the Study of School Culture, Teacher Self-Efficacy and Decision-Making Deprivation in Demonstrably Effective and Ineffective Schools

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Phase I (TEBS-S Pilot Study)
Development of the Teacher Efficacy Beliefs Scale (TEBS-S)

A. Search For Measures and Theoretical Alignment
   1. Preliminary Review of the Efficacy Theory
   2. Preliminary Review of Efficacy Research

B. Survey Development Stage 1: Analysis of Item Stem Response Patterns (*Can Do, Able to Do*, and *Strength of Belief in Capabilities To*)
   1. 3 15-item Survey Forms (n=434 teachers)
   2. Item Scaling 10 point scale

C. Survey Development Stage 2: Alignment of Questions and Self-efficacy Theory
   1. 51-item questionnaire aligned with components of effective teaching and theory of self-efficacy beliefs
   2. Expert Study ranking items by level of importance of each task (n=45 experts)
   3. Final selection of 30-items used on the TEBS-S

Phase II- Administration: Quantitative Dimensions
Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S)
Teacher Efficacy Beliefs Scale (TEBS-S)
Teacher Decision Making Scale (TDMS)

A. 555 teachers in 34 elementary schools (modified to 512 teachers in 30 elementary schools)

B. Hypotheses and Research Questions

C. Data Collection

D. Analyses: Factor Analyses, Scale Reliability, Correlations, Regression, and Discriminant Function

E. Summary

Phase III- School Visits: Qualitative Dimensions

A. Focus Group Protocol (Pilot)

B. Research Questions

C. Data Collection, Interviews, and Observations

D. Analysis: Cross Case Comparisons (2 schools)

E. Summary

(1997), is personal *beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments* (p. 3). Previous self-efficacy measures have asked respondents to complete statements that reflect their assessment of whether "I Can..." or "I Am Able To..." accomplish certain tasks set within various precepts suggesting self-confidence, motivation, and expectations. However, according to the theory of self-efficacy as proposed by Bandura (1973; 1997), such responses present a dubious conceptual difference between judgments that reflect one's personal belief system and judgments that reflect one's self-confidence, for example. In order to clarify whether the terminology influenced teacher responses, three 15-item forms representing a variety of teaching tasks were developed and two different versions of each were completed by 434 teachers from a southern rural school district (for a more in-depth discussion see Dellinger, Bobbett, Olivier, Ellett, 2001). The first two forms asked teachers to indicate their judgments similar to that of other efficacy measures in terms of whether "I can..." and "I am able to..." carry out the suggested task. In the interest of ensuring that the new measure captured conceptions proposed by self-efficacy theory as a belief, the third form asked teachers to indicate their judgments as, "The strength of my personal BELIEF in my capabilities to organize and execute courses of action to...".

Using a 10-point scale, as recommended by Bandura (1997), teachers responded to the three 15-item measures. Results from this initial field test indicated that responses from the BELIEF form had somewhat greater reliability than the other two forms. Of interest, preliminary results using the 10-point scale reflected item response patterns that ranged between 7 and 10 with most item-means ranging from 8 to 9. This discovery suggested that a 4-point scale might differentiate the strength of

teacher beliefs as well as the lengthier 10-point scale. Item stem and scaling questions were answered during this initial step. The three forms used in the field test are located on Table G_1, Appendix G. The next step involved refining questions and developing a line of inquiry that would represent the kind of teaching activities for which teachers would actually be held accountable.

An established psychometrically and conceptually sound classroom-based framework for the assessment of teaching and learning was used to refine and develop additional questions to measure the strength of teacher self-efficacy (Ellett, 1999). The teaching and learning framework provided various teaching domain specifications [Long-Ranged Planning, Managing the Learning Environment, Classroom Climate, Enhancing and Enabling Learning, Enabling Thinking, Classroom-Based Assessment of Student Learning, and Professional Responsibilities] and was utilized to compile a subsequent list of 51 teaching activities linked to effectiveness.

A panel of 45 expert educators from various levels of professional practice (i.e. classroom teachers, local, district and state administrators, university-level instructors) were asked to rate the importance of each of the 51 items generated. These experts were asked to rate each item "High, Medium, or Low" in terms of its importance as a "measure of belief in teaching ability." Items were rated *high in importance* by 75% of the respondents; however, items that were not rated as highly, or with comments of their unimportance or redundancy were omitted. From this initial item pool of 51 effective teaching tasks, 30-items having the greatest percentage of *high* ratings given by the 45 experts, were chosen for the measured used in this study. The initial 51-item expert opinion questionnaire is located on Table G_2, Appendix G.

The Teacher Self-Efficacy Beliefs Scale-Short Form (TEBS-S) used in this study was the 30-item measure. As noted above, the 4-point Likert-type scale was used in this final version where 1= "weak belief in my capabilities," 2 = "moderate belief in my capabilities," 3 = "strong belief in my capabilities" and 4 = "very strong belief in my capabilities." The item stem selected for the TEBS-S reads, *"In my present teaching situation, the strength of my personal beliefs in my capabilities to..."* Empirical results for Phase I the development of the TEBS-S are provided in a later section of this report. The TEBS-S 30-item measure can be located in Appendix C. The next section describes Phase II activities and further quantitative methods utilized in this study.

Quantitative Methodology: Phase II

Independent Variables

Independent variables are listed below, followed by each measure used to operationalize them: 1) Poverty (POV) represented by the percentage of the total student population on free and reduced price lunches; 2) school culture (Revised School Culture Elements Questionnaire-Short Form) (RSCEQ-S) (Bobbett, Olivier, Ellett, and Rugutt, 2000); 3) teachers' self-efficacy beliefs (Teacher Self-Efficacy Beliefs Scale-Short Form) (TEBS-S) (Bobbett, Dellinger, Olivier, and Ellett, 2000); and, 4) decision making and deprivation index (Teacher Decision Making Scale and Teacher Decision Deprivation Scale) (TDMS & TDDS) (Alutto-Belasco, 1972; Alutto-Belasco, 1973; Conway, 1976; Mohrman, Cooks & Mohrman, 1978; Bacharach, Bamberger, Conley, & Bauer, 1990).

Dependent Variable

The dependent variable used in this study was school effectiveness, as measured by school productivity and holding power. School performance was operationalized by the School Performance Score (SPS) derived by the Louisiana Department of Education (1998).

Sampling Procedures

Schools were selected as the unit of analyses for testing hypotheses and answering research questions guiding Phase II, quantitative analysis. Teachers were selected as the unit of analysis for psychometric testing of the study measures, and exploring research questions guiding Phase III, case study research. Table 3.2 summarizes the sampling procedures for the study.

Eight hundred seventeen elementary schools across the state received a 1998-99 School Performance Score (SPS) from the Louisiana Department of Education. The sample for this study was chosen from this population of elementary schools. A *stratified purposive sampling technique* was used for quantitative analysis. The total population (n=817 schools) was first ranked by the percentages of students on free and reduced price lunch (POV), then by School Performance Score (SPS). Schools in the highest and lowest POV/SPS quartiles (n=401 schools) out of the original 817 schools represented the targeted sample for this study. Schools in the sample were categorized into one of the following four groups:

Group 1 "High Poverty/High SPS" (labeled *Demonstrably Effective*)

Group 2 "Low Poverty/High SPS"

Group 3 "Low Poverty/Low SPS" (labeled *Demonstrably Ineffective*)

Group 4 "High Poverty/Low SPS"

Table 3.2

Summary of Sampling Procedures

Total Sample	No. Schools in Highest and Lowest POV/SPS Quartiles	No. of Schools Invited to Participate	No. of Schools Agreeing to Participate	No. of Schools *Actually* Participating (Quantitative)	No. of Schools meeting the criteria for inclusion >40% responding	No. of Schools *Actually* Participating (Qualitative)
Group 1 (High % Poverty/ High Performance	n=65 schools	n=22 schools	n=14 schools 314 teachers	n=12 schools 196 teachers	n=12 schools 196 teachers	
Group 2 (Low % Poverty/ High Performance	n=156 schools	n=22 schools	n=9 schools 702 teachers	n=5 schools 90 teachers	n=3 Schools 67 teachers	n=1 school 6 teachers
Group 3 (Low % Poverty/ Low Performance)	n=134 schools	n=22 schools	n=11 schools 345 teachers	n=10 schools 147 teachers	n=10 schools 147 teachers	
Group 4 (High % Poverty/ Low Performance	n=46 schools	n=22 schools	n=7 schools 173 teachers	n=7 schools 122 teachers	n=5 schools 102 teachers	n=1 school 6 teachers
N=817 Schools Faculty Count Not Available (N/A)	n=401 schools Faculty Count N/A	n=88 schools Faculty Count N/A	n=41 schools 1,057 total faculty	n=34 schools 555 teachers	n=30 Schools 512 teachers	n=2 schools 12 teachers

From this initial stratified population, a total of n=88 schools were invited to participate (i.e., twenty-two schools from each high-low quartile POV/SPS category identified). Of the 88 schools invited, n= 41 schools volunteered to participate in the study. Approximately 1,057 *total faculty* were represented in the final sample of participating schools. A response rate of 40% was established for inclusion in this study. Useable data were collected from 555 teachers in 34 elementary schools. For purposes of hypothesis testing and answering research questions however, this number was reduced to 512 teachers in 30 elementary schools.

Data Collection Procedures

Survey Data

Permission to conduct Phases II and III of the study was obtained by the State Superintendent of Education and included an approval form to be returned by each district superintendent. Once approval was obtained from the district superintendent school principals were asked to support the study by returning the name of a contact person willing to assist in the distribution, collection, and return of the survey packet.

Survey packets sent to each participating school included a cover letter explaining the purpose of the study, procedures for the designated school contact, time lines for completing the survey and follow up reminder to teachers to be given out after one week. The contact person was given personal follow-up phone calls thanking them for their assistance after one week. The teacher questionnaire included a cover letter to teachers with instructions and indicated a two-week time line for returning the survey, assurance of anonymity, statement that participation was purely voluntary, and potential for follow up study. Teachers that were asked to participate in the follow up study were also asked to sign a teacher consent form indicating their permission to use

the focus group information for research purposes. Cover letters and letters of permission used in the study are located in Appendix A.

The questionnaire consisted of the following three data collection instruments: 1) a shortened version of the Revised School Culture Elements Questionnaire (RSCEQ) *Teachers' Actual Perceptions* (Cavanagh, 1997; Bobbett, Ellett, Olivier, and Rugutt, 1998; Olivier, Bobbett, Ellett, and Rugutt, 1998; Davis, Ellett, and Rugutt, 1999) located in Appendix B; 2) the Teachers' Self-Efficacy Beliefs Scale-Short Form (TEBS-S) developed specifically for this study located in Appendix C; and 3) and the Teacher Decision Making Scale (TDMS) *Have and Should Have Opportunity* based on previous versions of the School Decisional Participation Scale (SDPS) (Bacharach, 1990; Johnson and Ellett, 1991; Taylor and Bogotch, 1994; Hoy & Miskel, 1996) which is located in Appendix D. The Teacher Decision-Making Deprivation Scale (TDDS) is an index calculated as the difference between the TDMS *Have Opportunity* and *Should Have Opportunity* responses.

Additional information was collected on the teacher questionnaire to describe personal and professional characteristics of teachers participating in the study. Other demographic data used to describe school characteristics for 1998-99 were compiled by the LDE and included: 1) percentage of the students on free and reduced price lunch (i.e., poverty), 2) percentage of the student population minority, and 3) percentage of the student population needing special education. These data are presented for each school in the sample on Table F_{11}, in Appendix F.

School Effectiveness

The School Performance Score (SPS) derived by the LDE is an index made up of student achievement and student attendance data. School productivity, often

reflected in terms of student achievement. The SPS reflects school productivity as a combination of student performance on criterion-referenced and norm-referenced tests. In addition, school holding power, or the appeal of the school, is reflected as an indicator measured by school attendance and drop out rates. These indicators are represented within the SPS as well. Combined these indicators are often referred to as dimensions of school effectiveness and for the purposes of this study is referred to synonymously as school productivity and holding power.

Study Measures

The following three sections of this chapter discuss the historical development, structure/scoring, and psychometric properties where applicable for each of the measures utilized in this study.

Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S)

The RSCEQ-S represents a modified version of the original School Culture Elements Questionnaire (SCEQ) developed by Cavanagh (1997). The original SCEQ measure was designed to explore teacher behaviors related to or beliefs about cultural elements content classified into eight domains of effectiveness (i.e., professional values, teachers as learners, collegiality, mutual empowerment, collaboration, shared visions, school-wide planning, transformational leadership). Two sections of the SCEQ asked teachers to share their perceptions of the actual (*How I and my school actually are*) and preferred (*How I wish things were in my school*) dimensions of the elements of school culture.

Cavanagh's original 64-item survey has been replicated, edited, and extended using factor analysis in several subsequent studies (Bobbett, Olivier, Ellett, and Rugutt, 1998; Olivier, Bobbett, Ellett, and Rugutt, 1998; Davis, Ellett, and Rugutt, 1999).

Three cohesive subscales have been shown to account for the majority of variance in the data from these studies, thus enhancing overall reliability estimates (Davis, Ellett, and Rugutt, 1999). For purposes of this study, the RSCEQ-S represents a self-report instrument designed to measure teachers' *actual* perceptions of multiple dimensions of the school's professional culture characterized in terms of shared leadership and vision, the teachers' professional commitment, and by the collegiality teaching and learning environment supported.

School culture, as conceptualized in this study, represents the norms, values, beliefs, and assumptions of individuals that work at a particular school. Moreover, the dimensions measured have been conceptually and empirically linked to school effectiveness in a number of previous studies (e.g., Cavanagh, 1997; Loup, 1994; Wang, Haertel, & Walberg, 1993). The school's professional culture is portrayed in this study as the result of a dynamic process reflecting how the combination of norms, values, beliefs, and assumptions can either strengthen or weaken the actual quality of the professional learning environment. The RSCEQ-S was designed to differentiate school culture in terms of teachers who perceived school norms as supportive of professional development, who value and take advantage of opportunities to grow professionally, and who believe that professional activities are supported by administration. Consequently, the strength of the school's professional culture, as reflected by the teachers' perceptions of the actual school environment was conceptually tied to school effectiveness.

Structure/Scoring

The Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S) consisted of 20 items, each representing the teachers' perceptions of the actual and the

preferred school environment in terms of *how you and your school actually are* and *how you would prefer you or your school would be.* A four-point, forced choice Likert-type scale (ranging from 1=*Strongly Disagree* to 4= *Strongly Agree*) was used to indicate the strength to which the RSCEQ-S dimensions occurred in their school. The RSCEQ-S item/subscale scores were used to depict cultural characteristics (i.e., norms, beliefs, values, and assumptions) of the school organization as reflected through dimensions of shared leadership and vision, teachers' professional commitment, and support for the collegial teaching and learning environment. Total RSCEQ-S scores ranged from 20 to 80. A higher RSCEQ-S score represents the presence of more professionally supportive cultural dimensions than a lower RSCEQ-S score. Conceptual definitions and examples of RSCEQ-S items are included in Appendix B.

Validity

Face validity of the RSCEQ-S was established through subsequent revisions to the original 64-items (Australian version) which was comprised of 8 school cultural dimensions (professional values, teachers as learners, collegiality, mutual empowerment, collaboration, shared visions, school-wide planning, transformational leadership). These dimensions characterize the school's professional culture (Cavanagh, 1997; Cavanagh and Dellar, 1997). Content validity was established through a review of the literature on school effectiveness and related literature dealing with aspects of shared leadership, teacher collaboration, school culture, school climate, and effective teaching and learning. Construct validity of the subscales that represent dimensions of a professional school culture has been established through the use of

factor analyses in a number of previous studies (Bobbett, Olivier, Ellett, & Rugutt, 1998; Olivier, Bobbett, Ellett, & Rugutt, 1998; Davis, Ellett, & Rugutt, 1999).

Slight modifications were made to the original 64-item questionnaire in order to accommodate colloquial terminology, response format, and wording of statements in a positive manner (Bobbett, et al., 1998). A five-factor solution from the Bobbett et al. study described teacher behaviors and beliefs in terms of Shared Leadership and Vision, Professional Values, Professional Growth, Professional Commitment, and Professional Relationships. Further modifications to the RSCEQ included the addition of 14 items (Olivier, Bobbett, Ellett, and Rugutt, 1998). The 78-item instrument defined teacher beliefs and behaviors in terms of Vision/Leadership, Collegial Teaching and Learning, Professional Commitment, Openness/Collaboration, and Professional Relations/Interactions. A more recent factor analysis (Davis, Ellett, and Rugutt, 1999) identified Professional Commitment, Collegial Teaching and Learning, and Vision/Leadership as three salient dimensions measured by the RSCEQ. The RSCEQ-S represents a shortened version of the RSCEQ and is made up of 20 items having the highest factor loadings found in prior factor analyses (i.e., Bobbett, et al., 1998; Olivier, et al.,1998).

Criterion-related validity of the RSCEQ-S was examined in this current study using a series of bivariate and multivariate correlational analyses between the RSCEQ-S subscales and subscales measured by the TEBS-S and TDMS.

Reliability

Internal consistency reliability characteristics of the RSCEQ-S subscales were explored (n=555) in the present study. Cronbach Alpha reliability coefficients were computed for each of the RSCEQ-S subscales.

Alpha coefficients from a number of previous studies document the reliability of the RSCEQ-S subscales identified. The subscale, number of items retained (shown in parenthesis), and alpha reliability coefficients are provided from a number of studies. Elements of school culture identified in the original 64-item SCEQ (Cavanagh, 1997) were as follows: Professional Values (8) .69; Teachers as Learners (8) .70; Collegiality (8) .62; Mutual Empowerment (8) .65; Collaboration (8) .69; Shared Vision (8) .67; School-Wide Planning (8) .65; and Transformational Leadership (8) .66. A cross-cultural study was conducted using a modified version of the original 64 item scale (Bobbett, Olivier, Ellett, and Rugutt, 1998). An orthogonal (Varimax) rotation of the RSCEQ items resulted in a five-factor solution consisting of (42 scale items): Shared Leadership and Vision (13) .91; Professional Values (9) .87; Professional Growth (5) .83; Professional Commitment (9) .81; and Professional Relationships (6) .74.

Further modifications to the RSCEQ (Olivier, Bobbett, Ellett, and Rugutt, 1998) resulted in the development of a 78-item instrument. A series of orthogonal (Varimax) rotations resulted in a five-factor solution consisting of (56 scale items): Vision/Leadership (18) .93; Collegial Teaching and Learning (14) .89; Professional Commitment (11) .87; Openness/Collaboration (7) .75; and Professional Relations/Interactions (6) .76. More recent alpha reliability coefficients were reported for a three-factor structure as follows: Professional Commitment .88; Collegial Teaching and Learning .91; and Vision/Leadership .97. (Davis, Ellett, and Rugutt, 1999).

Teacher Efficacy Beliefs Scale-Short Form

An outline that described the steps taken to develop the TEBS-S was provided earlier in this section (see Table 3.1). The following section describes relevant aspects of the structure of the measure and scoring components and steps to establish validity and reliability.

Instrument Development Activities

Teacher's self-efficacy beliefs was operationalized by the Teachers' Efficacy Beliefs Scale-Short Form (TEBS-S) developed specifically for this study. Teacher self-efficacy was conceptualized as a personal belief system that reflects one's own *capabilities to organize and execute various courses of action required to produce given attainments* that were qualified in terms of effective teaching (Bandura, 1997; Ellett, 1999). Table 3.3 summarizes the three steps taken to develop the TEBS-S. The following general procedures were utilized:

1. Preliminary examination of the recommended item scaling (i.e., 0-100 or at minimum 0 to 10) and degree of variation in response patterns. Conceptual and operational inconsistencies of self-efficacy were addressed first by administering three forms of a preliminary 15-item survey that phrased teaching tasks as responses to either "...Can Do...", "...Able To Do...", and/ or "...My Personal Beliefs In My Capabilities To...".

   An initial item pool was developed using the Professional Assessment and Comprehensive Evaluation System (PACES) (Ellett, 1999). Six domains of effective teaching and learning were utilized (Long-range Planning, Managing the Learning Environment, Classroom

Table 3.3

TEBS-S Development: Three Initial Steps

Step 1	Step 2	Step 3
Field Test 3 TEBS Forms of the 15-item measure n=434 Teachers Ten-point scale	Face/Content Validity Study TEBS 51-item measure n=45 Experts Item Rating: High, Medium, or Low Importance	Current Study TEBS-S 30-items selected by research team members based on Step 2 findings Four-point scale selected based on Step 1 findings

Management, Enhancing and Enabling Learning, Enabling Thinking, and Classroom-Based Assessment of Student Learning).

2. An expert opinion questionnaire was completed in order to determine the relative importance (High, Medium, or Low) for each of the 51-items generated.

3. Final selection (by research team members) of 30 items rated highest by experts for the current study. Revised response format to 4-point scale.

Structure/Scoring

The 30-item TEBS-S anchored scales from 1 (weak beliefs) to 4 (very strong beliefs). Each itm asked teachers to make judgments about their capabilities within their present teaching situation to carry out tasks that reflect components of effective teaching. A 4-point Likert-type scale asked teachers to respond according to the strength of their personal beliefs 1 =*very weak beliefs* to 4 = *very strong beliefs*. Total TEBS-S scores ranged from 30 to 120. Higher TEBS-S scores represent stronger self-

efficacy beliefs (i.e., self-assessment of professional abilities) than do lower TEBS-S scores. Conceptual definitions and example TEBS-S items are included in Appendix C.

Validity

Face validity of the TEBS-S was established through a review of the related literature that included an examination of the theory of self-efficacy and previous measures of teacher, self, and personal efficacy. According to Messick (1995) an important aspect of construct validity involves the evidence and rationales used to interpret scores and how the meanings attributed to those scores influence *actual and potential consequences* (1995, p. 745). This aspect validity was supported by the combination of literature, research, and conceptual model used to give the scores meaning in terms of a salient measure of teacher self-assessment as measured by efficacy beliefs about their professional teaching abilities. Content validity was established through reviews of the self-efficacy literature, expert opinion and consensus, and factor analysis to define subscale constructs. Criterion-related validity was examined through a series a bivariate and multivariate correlational analyses between the TEBS-S and the SPS.

Reliability

Internal consistency reliability characteristics of the TEBS-S items was explored using Cronbach's alpha reliability coefficients for each of the TEBS-S factor analyzed subscales: Classroom Management, Communicating/Clarifying, Accommodating Individual Learning Differences, and Instilling Higher Order Thinking Skills in the present study. Results are reported in Chapter Four.

Teacher Decision-Making Scale (TDMS)

Alutto and Belasco (1972; 1973) examined teacher decision making in terms of the degree of difference between their actual participation and desired level of participation. Since then, a number of other studies have examined teacher participation in decision making in terms of outcomes. Bacharach et al. (1990) developed the School Decision Participation Scale (SDPS), a 19 item self-report instrument to measure the following components: Managerial-Organizational, Managerial-Personal, Technical-Organizational and Technical-Personal. The TDMS in this study asked teachers to indicate their perceptions about decision making in terms of the extent to which they *Have Opportunities* to make the kinds of decisions listed and the extent to which they *Should Have Opportunities* to make the kinds of decisions using the original 19 items in the SDPS (Bacharach et al., 1990).

Structure/Scoring

The TDMS measure consisted of 19 items that represented a variety of decisions. A 4-point Likert-type scale was used to ask respondents to indicate both their actual and desired levels of participation in the decision making process. Scales scores ranged from 1 (*Seldom to Never*) to 4 (*Almost Always*). Teachers were asked to indicate the level of their involvement for each decision making activity from two perspectives: 1) the extent to which they *Have Opportunity* and 2) the extent to which they *Should Have Opportunity* for involvement in suggested decisional areas. Total TDMS scores ranged from 19 to 76. Higher TDMS scores reflected more opportunities to participation in decision making than lower TDMS scores.

The Teacher Decision-Making Deprivation Scale (TDDS) was an index derived for each item that represents the difference between the two initial responses (*Have*

Opportunity and *Should Have Opportunity*) on the TDMS and the professional deficiency represented in terms of the teachers desire to be included in the suggested decision. Higher TDDS scores indicate greater professional deficiencies expressed by teachers than to lower TDDS scores. The TDMS measure and conceptual definitions can be found in Appendix D.

Validity

The decision discrepancy procedure developed by Alutto and Belasco, (1972) was given to determine whether teachers were deprived, saturated, or satisfied in terms of decision making. Alutto and Belasco confirmed the content and criterion-related validity of the procedure. Conway's (1976) exploration of responses from principals and assistant principals reconfirmed the validity of the measure. Conway found that teachers who were more decisionally deprived and decisionally saturated were less satisfied with their school than those responding as decisionally satisfied.

Continuing refinements to the exploration of decision making (e.g., Cooke & Mohrman, 1978) clarified that work satisfaction and role ambiguity were correlated with participation in technical decisions, but not in managerial decisions (Clarke, 1997). Bacharach et al. (1990) reworded the items and factor analysis results indicated that a four-factor solution could account for approximately 60% of the variance in the data. As a result, the decision-making measures were redefined as the following subcategories: Managerial-Personal, Technical-Organizational, Managerial-Organizational, and Technical-Personal. Johnson (1991) found similar results to that of Bacharach (1990). Taylor and Bogotch (1994) utilized the original 19 item SDPS and redefined the four dimensions as Associated Technology, Managerial, Instructional

Materials, and Core Technology. Criterion-related validity was examined through bivariate and multivariate correlational analyses between the TMDS and SPS.

Reliability

Mohrman (1978) identified a two-factor solution for a 12 item version with alpha reliabilities of .75 (managerial decisions) and .83 (school technical decisions). Cronbach alpha reliability coefficients of the School Decision Participation Scale (SDPS) for each subscale were reported to range from .66 to .86 (Bacharach, 1990). Johnson (1991) identified a four- factor solution using a 19 item SDPS with alpha reliabilities ranging from .79 to .89. Alpha reliability coefficients for the four subconstructs identified by Taylor and Botgotch, ranged from .66 to .89.

Data Analyses

Schools were used as the unit of analysis for testing the hypotheses and research questions. Teachers were used as the unit of analysis for all psychometric testing. Figure 3.1 presents a flow chart describing the series of data analyses conducted during this study.

A series of analyses were completed to address the hypotheses and research questions in this study:

1. Summary descriptive statistics of the demographic variables measuring the mean, standard deviation, range, and percentages of the maximum possible scores for each factored subscale of the independent measures for the total sample and sub groups identified;
2. Factor analyses using principal components and orthogonal (Varimax) rotations to identify constructs and establish construct validity of the

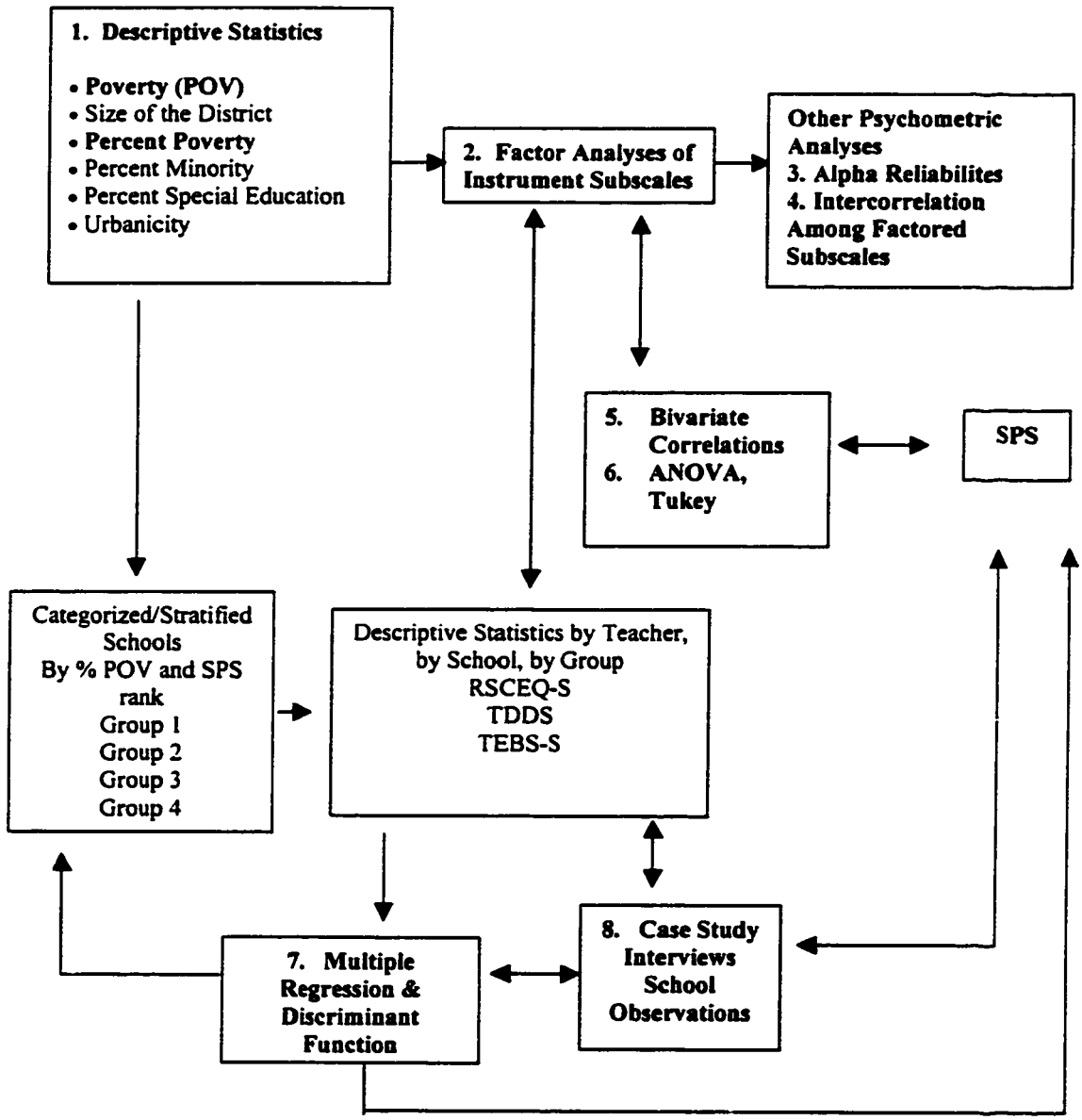

Figure 3.1

Flow Chart of Data Analyses

1 Descriptives
2 Factor Analysis
3 Reliability Analysis
4 Intercorrelations
5 Bivariate Analysis
6 Statistical Analysis (Anova, Tukey)
7 Multivariate Correlational Statistics (Multiple Regression & Discriminant Function)
8 Case Studies

3. RSCEQ-S, TEBS-S, and TDMS measures, and to confirm the previously documented factor structures of the RSCEQ-S and TDMS.

4 Cronbach's Alpha reliability analysis to examine the internal consistency reliability of the RSCEQ-S, TEB-S, and TDMS scores for each item using teachers as the unit of analysis;

5 Intercorrelations (Pearson product-moment correlation coefficient (*r*)) among he factor analyzed subscale scores using schools as the unit of analysis to explore relationships among the study variables.Bivariate correlations (Pearson product-moment correlation coefficient (*r)*) to examine relationships among all the study variable subscales using schools as the unit of analysis;

6 Statistical analysis (One way analysis of variance, (ANOVA), Tukey's Honestly Significant Difference post-hoc comparison) to examine *natural* variations in subscale mean scores on the RSCEQ-S, TEBS-S, and TDMS and to determine whether differences among groups were significant using teachers as the unit of analysis.

7 Multivariate correlational statistics (multiple regression, discriminant analysis) to determine which of the RSCEQ-S, TEBS-S, and TDMS variables can be combined to predict school performance and/or group membership; and

8 Supplemental analysis of effect size calculations to estimate the magnitude and practical significance of group mean differences on the RSCEQ-S, TEBS-S, and TDMS subscales.

Descriptive Statistics

Summary descriptive statistics were completed for the demographic, dependent, and independent variables examined in this study. Means, standard deviations, ranges of scores on each factored subscale, and means expressed as percentage of the maximum possible score were reported for the total sample of schools. Poverty (POV) as measured by the percentage of students on free or reduced price lunch, percent minority, and percent in need of special education were also provided for each school. School performance scores reflect school productivity (i.e., student achievement on standardized tests) and holding power (i.e., student attendance). These terms were referred to synonymously as school effectiveness.

Factor Analyses

A series of factor analysis procedures was completed for each of the three measures (RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDMS (Have Opportunity)) used in this study prior to analysis of the hypotheses and research questions. The RSCEQ-S in this study was a shortened version of the original School Culture Elements Questionnaire (SCEQ) developed by Cavanagh and later refined as the RSCEQ (Bobbett et. al, 1998; Olivier et. al, 1998; Davis, Ellett, & Rugutt, 1999) and measured teachers' perceptions (*Actual* and *Preferred*) of school's professional culture. The TEBS-S was developed specifically for this study and measured teachers' self-efficacy beliefs that were linked to their professional abilities defined by effective teaching practices. The TDMS used in this study was based on the original School Decision Participation Scale (SDPS) (Bacharach, 1990), and used in a number of later explorations (Conway, 1976; Cooke & Mohrman, 1978; Johnson, 1991; Taylor & Bogotch, 1994; Clarke, 1997). The TDMS measures teachers' perceptions about

whether they *have opportunity or should have opportunity* to be involved in decisions that are related to a list of suggested activities. Initial, exploratory, and principal components factor analysis procedures were used to verify dimensions of the RSCEQ-S (Teachers' Actual Perceptions) and TDMS (Have Opportunity) measures and establish the dimensions to be examined using the TEBS-S measure.

Data were examined for missing responses prior to analysis and the grand item mean substituted in order to maximize the number of useable responses for the analysis. For each measure, a series of principal components factor analysis procedures were completed to derive unconstrained factor solutions, followed by orthogonal rotations (Varimax), iteratively extracting from one to five factors, and terminating when factor eigenvalues of 1.0 were obtained. Intercorrelations were completed for each factored subscale and for items within each factor. Teachers were used as the unit of analysis.

One factor solutions and factor pattern matrices were used to examine factor loadings. Orthogonal rotations were completed for solutions beyond the one-factor in order to generate a set of factors that were most uncorrelated with the other sets of factors generated. These conceptually independent factors were used to define constructs that would not overlap in meaning. Rotated factor pattern/structure matrices were used to examine factor loadings for orthogonal (Varimax) solutions.

Validity and reliability concerns were addressed by 1) establishing face and construct validity of the items using conceptual and 2) using the number of items for each subscale that measured the greatest amount of variation and number of items, respectively.

A set of decision-making rules for item retention on factors for the set of measures was established for this study. Rules included: 1) the magnitude of the item loading under one factor must be greater than .33; 2) the item must load primarily on one factor; 3) items loading on multiple factors must have a difference between item/factor variance greater than 10%.

Factor analysis of the TEBS-S was exploratory in nature, since it was developed specifically for this study. Factored subscales were defined based on factor loadings and the best conceptual and statistical definition of the constructs suggested by these results. Factor analysis of the RSCEQ-S and TDMS was completed in order to verify previously identified dimensions of school culture and decision-making.

Reliability Statistics

Cronbach Alpha reliability procedures were used to examine internal consistency reliability of the set of measures (RSCEQ-S, TEBS-S, and TDMS) in this study. Factored subscale scores and total instrument scores for the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDMS (Have Opportunity) were used. Alpha coefficients were computed using teachers as the unit of analysis (n=555).

Correlational and Multivariate Analyses

In response to the series of hypothesis and research questions, a series of bivariate and multivariate correlations were completed. The relationship between the independent variables (RSCEQ-S, TEBS-S, TDMS, TDDS index, and POV) and the dependent variable (SPS) was examined. Analyses included: 1) Pearson product-moment correlations among the dependent and independent variables were examined; 2) multiple regression analyses regressing the SPS (dependent variable) on subscales of the independent measures (RSCEQ-S, TEBS-S, TDMS, TDDS index, and POV); 3)

statistical analysis of mean scores using one-way ANOVA and Tukey's HSD to determine whether differences in mean scores were significant; and 4) discriminant function analysis to examine whether any combination of the independent variables could be used in combination to predict group membership.

Teachers were used as the unit of analysis for psychometric testing of the study measures, while schools were used as the unit of analysis to answer the hypotheses and research questions addressed through quantitative analysis. Results from the quantitative analyses are presented in Chapter Four. The next sections describe the methods used for qualitative analysis.

Qualitative Methodology: Phase III

A growing number of studies have shown linkages between leadership and vision, collegial teaching and learning, professional commitment, decision making, personal self-efficacy, and student academic achievement (Ellett et al, 1997, Wang, Haertel & Walberg, 1993; Cavanagh, 1997; Bandura, 1997; March, 1994). This section describes the methodology for the qualitative phase of the mixed methods examination of the linkages among school culture, teacher self-efficacy, and decision-making and school effectiveness. The case studies provide an additional source of evidence validating the study findings and were designed to improve the overall quality of the study. It was the aim of this study, through case study design, to address the following three concerns:

1) to describe the school's professional (i.e., natural) working environment using constructs outlined by the RSCEQ-S measure and associated with school effectiveness.

2) to record salient, characteristic features of the learning environment that can be used to explain teacher self-efficacy beliefs, using self-efficacy theory (Bandura, 1997) to guide observations.

3) to document themes that validate the linkage between teacher involvement in decision-making and school effectiveness.

The following sections outline the qualitative methods used in this part of the study. Sampling procedures, participant selection, data collection procedures, contextual observations, case study database developed, data analysis plan, outline of individual case study reports, and issues of validity and reliability are summarized. The case study packet developed as a result of Phase III included: an introductory letter explaining the purpose of the study, teacher consent form, focus group protocol, contextual observation checklist, and the schools' FY1999-00 school improvement plan.

Key products from the case studies include the following:

1) results from the observations of schools

2) results from focus groups

3) individual case studies, and

4) cross-case analysis

Sample Selection

Yin (1994) described the use of the embedded case study design as appropriate when examining multiple units of analysis. The present study utilized an embedded multiple case study design, or Type 4 design. Schools were the sampling units of analyses, with teachers as embedded subunits. The focus group protocol (see Appendix E) developed for this study was piloted prior to actual implementation in

order to explore the face and content validity of the study dimensions. As a result of this initial step, questions were modified and potential problems clarified.

As mentioned earlier in this chapter, schools were categorized into one of four groups based on the percentage of students on free and reduced price lunch and the 1998-99 school performance score. In Phase III, schools were selected for further study based on three criteria: 1) the school selected best represented the POV/SPS group into which they were originally categorized, 2) principals and teachers were willing to participate, and 3) quantitative differences proved to be statistically significant.

Participant Selection

The Application for Exemption from IRB (Institutional Review Board) Oversight for Studies Conducted in Educational Settings from the LSU College of Education was completed and approved by the Associate Dean of Education. Teachers who were invited to participate in one-hour focus group sessions were chosen based on a stratified (by grade level), random sampling technique. Sessions were informal and teachers were told that the study included tape-recorded sessions unless there was an objection. Teachers shared their perceptions, beliefs, and opinions related to a series of questions designed to verify the patterns of responses indicated by the preliminary teacher survey. Teachers were asked to sign a consent form with a statement of assurance that the information collected would be used only for educational purposes (see Table A_5, Appendix A).

Data Collection Procedures

Yin (1994) discussed six common sources of evidence useful in case study research: existing documentation, archival records, interviews, direct observation,

participant-observation and physical artifacts. Yin also explained three principles that can maximize the benefits of collecting the six common sources of evidence (1994, p.90). One principle was that multiple sources of evidence should be collected, the second principle was to develop a case study database, and the third principle was to maintain a chain of evidence so that the issues of internal validity, external validity, and reliability are addressed. Following Yins' principles to maximize the benefit of the data collected, the focus group protocol, contextual observation checklist, and school improvement plan provided multiple sources of related information and was used to develop each case study database. The chain of evidence needed to establish validity and reliability was provided through careful documentation and labeling.

It has been suggested that case studies represent a bounded system (Stake, 1995) in which time and place are defined. The time of the current study was one year following announcement of the first set of school performance scores derived by the state for each school.

Field visits provided an opportunity to observe conditions of the school environment and to document the findings. Of interest were physical and/or cultural artifacts that could be attributed to the quality of school leadership, collegiality, professional commitment, self-efficacy beliefs, and level of decision-making.

Observations of the schools were conducted using the Contextual Observation Checklist developed as part of the School Analysis Model (SAM) for the Louisiana Department of Education (Beaudoin, 1998). Table E3 shows the checklist used in this study (see Appendix E). Particular attention was given to the importance placed on academic success as reflected by the overt and covert messages suggested by the kind and location of awards and posters displayed.

Cross case comparisons of schools explored differences and similarities in terms of the school's professional culture, teacher self-efficacy, and decision making deprivation and their conceptual linkages to student achievement.

Contextual Observations

In addition to the focus group sessions an observation checklist was completed, Supplemental information (as noted in field notes) reflected latent and overt messages linked to student academic attention or success. Examples include awards and posters displayed around the school. In addition, the school improvement plan was collected and was used to provide additional information about embedded dimensions of the school's culture. In sum, the focus group sessions, contextual observations, and school improvement plan helped ensure consistency of the data collected and enhanced the comparisons made (Herriott & Firestone, 1983).

The Case Study Database

The database, developed as part of this study, provided a summary of the field notes that were collected, written description of the school site and documentation of the relevant aspects of the school improvement plan for each site. The case study database for each school consisted of the following information:

I. Focus Group Summary (to develop emergent themes and patterns)
II. Descriptions of School Sites (observational data to develop the context)
III. School Improvement Plan (to supplement I and II above)

Analysis Plan

A holistic approach was used to guide data collection and analysis of multiple sources of information, which Patton (1990) explains as a strategy whereby "...the

whole is understood as a complex system that is greater than the sum of its parts..." (p. 49).

Triangulation of both the quantitative and qualitative data provided the comparative analysis for a three-fold process. First, a pilot test of the focus group interview protocol and observational checklist was completed. This information was helpful in clarifying the questions provided a first look at potential categories and themes of response. Second, independent profiles were developed for each school that included the results from the quantitative survey results and qualitative data collected during the site visit. Third, cross case analysis of the schools was conducted to examine differences and similarities in the school culture, teacher self-efficacy, and decision-making deprivation perceived by teachers.

Seven factors recommended by Krueger (1994) were also used in analyzing the focus group data: 1) words and similarity of their meanings, 2) context within which comment were made, 3) internal consistency of responses, 4) frequency, 5) intensity of responses, 6) specificity, and 7) big ideas that emerged. Tape-based analyses was used to prepare an abridged transcript approximately (3 –10 pages long) for each group interviewed (Krueger, 1994). Table 3.4 contains an outline for the final reports.

Single Case Analysis

The data collected from each school was analyzed, synthesized, and reported as an individual case study. Each report consists of a summary of the focus group results, the noteworthy school contextual elements observed, and a quantitative profile of the school. Particular attention was given to trends and patterns for each question within the context of the purposes of the study stated earlier in this chapter.

Table 3.4

Outlines for the Individual Case Study and Cross Case Analyses Reports

A. Outline of Case Study Reports

I. Executive Summary

II. Introduction

- a) Relevant Quantitative Data
- b) Contextual Overview
- c) Profile of Teacher Perceptions
- d) Aspects of Existing School Improvement Plans

III. Description of the Site Visits

- a) Maps
- b) Dates of Visits and Other Particulars
- c) Observational Checklist (field notes)

IV. Interviews with Teachers

- a) Focus Group Sessions

V. Profile of the School Based on Responses and Other Source

- a) Coding
- b) School Profile

VI. Conclusions

- a) Summary
- b) Inferences

VII. Appendices

B. Cross-Case Analysis

I. Descriptive Information (Setting, Teachers, and School)

II. Explanatory Information (Response Patterns and Emergent Themes)

III. Cross-Case Report

Cross Case Analyses

The conceptual framework for the study suggested that the schools' level of effectiveness depend upon elements of the school's professional culture, level of teacher's self- efficacy, and level of involvement in decision making. Each case represented a different context for the school's level of effectiveness. Themes that cut across these contexts or that distinguished among the contexts were reported. Cross case analyses allowed group comparisons of teacher perceptions with regards to the professional infrastructure and contexts for teaching and learning. Also compared was whether there were differences in the response patterns. In addition, cross-case analysis provided an examination of multiple settings within which perceptions about the overall quality of schooling were generated.

Credibility

The case study database developed as a result of this study contains the original field notes, physical artifacts noted, tape recordings, tabular materials generated, and final reports. Credibility, or *trustworthiness* of the study conclusions/inferences, was enhanced through data triangulation of the data sources, just mentioned, and their collective support for the emerging patterns and themes that were identified (Tashakkori & Teddlie, 1998; Patton, 1990; Creswell, 1985). Every effort was made to maintain a *chain of evidence* supporting the conclusions/inferences by cross-referencing the multiple sources of information made available during this study (Yin, 1994). Documents were properly labeled and cited within the report. Time, location, and dates were marked on the evidence collected. Finally, the researcher utilized the protocol developed to guide the study at each school visited.

Cross-case analyses of multiple cases and pattern-matching responses from the participating schools helped strengthen the credibility (internal validity) and dependability (reliability) of the overall study. Specific themes, ideas, and details were unitized and categorized through the use of the constant comparative method (Lincoln & Guba, 1985; Tashakkoi & Teddlie, 1998; Stake, 1995; Patton, 1990).

Trustworthiness

Several strategies were used to reduce systematic bias, thus improving the *trustworthiness* of the study. One strategy was strict adherence to the study design and use of the protocol developed. A second strategy was to provide an opportunity for the observer to note any personal reactions they might experience during the course of a field visit. A third strategy was to provide a debriefing session after site visits whereby members could verify the validity of their interpretations. Finally, threats to validity introduced by sampling bias, external events that effect the timing and or the place in which the observations took place were noted and described in Chapter Five.

Transferability

Some qualitative researchers refer to *transferability* as the generalizability of results/conclusions/inferences (Tashakkori & Teddlie, 1998). Care was given to provide accurate descriptions of the school contexts and of teacher perceptions in order to enhance the transferability of the findings to other specific situations and for validating the theoretical constructs measured in this study.

Chapter Summary

Chapter Three summarized the three phases of research conducted to complete this study. The quantitative section of this chapter described both Phase I instrument

development procedures and Phase II the administration of the set of study measures. The qualitative section of this chapter described Phase III procedures and use of Phase II data for the case studies conducted. The research design, instrumentation, data collection and data analysis procedures utilized were presented. Chapter Four presents the results from Phase II, the quantitative phase. Pertinent hypotheses and research questions are addressed. Chapter Five presents the results and pertinent research questions from Phase III, the qualitative phase.

CHAPTER FOUR: SUMMARY OF QUANTITATIVE RESULTS

Introduction

Chapter four presents the results from Phase II (the quantitative phase) of the study. Presented are the following:

1) descriptive statistics for the sample,
2) factor analyses for the Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S), Teacher Self-Efficacy Beliefs Scale-Short Form (TEBS-S) *Teachers' Actual Perceptions*, and Teacher Decision Making Scale (TDMS) *Have Opportunity*.
3) reliability analyses,
4) intercorrelations among the factored subscales for each measure,
5) restatement of Phase II hypotheses and research questions,
6) analyses to test Phase II hypotheses,
7) analyses to answer Phase II research questions, and
8) supplemental quantitative analyses for Phase III.

The independent variables included three dimensions of the factor analyzed RSCEQ-S (Teachers' Actual Perceptions), four dimensions of the factor analyzed TEBS-S, and three dimensions of the TDMS (Have Opportunity). Subscales for the RSCEQ-S identified were labeled: 1) Shared Leadership, 2) Professional Commitment, and 3) Collegial Teaching and Learning. Subscales for the TEBS-S were labeled: 1) Classroom Management, 2) Communicating/Clarifying, 3) Accommodating Individual Learning Differences, and 4) Instilling Higher Order Thinking Skills. Subscales for the TDMS were labeled: 1) Core Technology, 2) Operations/Management, and 3) Work

Setting/Context. The School Performance Score (SPSs) was used as the dependent variable.

Summaries of the descriptive statistics for schools in the sample (e.g., percentage of students on free and reduced price lunch, percent of the student population that represent minorities, and percent of the student population identified as needing special education) are included in Appendix F (see Table F_{11}).

Summary of Descriptive Statistics for the Survey Sample

School Sample

Teachers from (n=1,057 total faculty) 65 elementary schools in a southern state were invited to participate in the study. Invitations mailed to district superintendents and principals indicated that participation in the study was voluntary. Usable data were received from 555 teachers in 34 schools elementary schools. The overall teacher response rate represented 53% of the total faculty.

Table 4.1 reflects descriptive statistics for schools organized into the following four groups:

Group1 "High %Poverty/Mid SPS"

Group 2 "Low %Poverty/High SPS"

Group 3 "Mid % Poverty/Mid SPS"

Group 4 "High % Poverty/Low SPS"

The overall return rate which represented a teacher to faculty ratio of 53% (1,057/555) ranged from 40%-67% across the four groups of schools in this study.

The number of schools in each group and the distribution of faculty and students in each of the four groups are also shown in Table 4.1. Group 1 contained 12 schools, Group 2 contained 5 schools, Group 3 contained 10 schools, and Group 4 contained 7

Table 4.1

Profile of the Sample for All Schools and By Group Level (n=555 teachers)

Characteristic	Group 1	Group 2	Group 3	Group 4	Total
Total Number of Schools	18	16	19	12	65
Number of Schools Responding	12	5	10	7	34
Total Number of School Faculty	294	221	347	195	1,057
Number of Teachers Responding	196	90	147	122	555
Return Rate as percent of Total Faculty	67%	41%	43%	63%	53%
Mean Teacher Response [a]	16.3	18	14.7	17.4	16.3
Minimum Faculty Size	13	28	16	21	13
Maximum Faculty Size	37	73	58	31	73
Number of Students	3,881	3,656	4,828	2,516	14,881
Number of Students Expressed as Percentages	26%	25%	32%	17%	100%
Minimum Student Size	140	519	229	294	140
Maximum Student Size	519	1,104	993	456	1,104

[a] Mean teacher response is the average number of teachers responding per school group.

schools. The mean number of teachers responding to the survey, per school was 16.3. The average number of teachers responding by group ranged from a low of 14.7 (Group 3) to a high of 17.4 (Group 4). The total student population represented in this sample of grades K-8 (n=14,881), ranged from a low of 2,516 students (Group 4) to a high of 4,828 students (Group 3). For the total sample, the distribution of students was as follows: Group 1 contained 26% of the total number of students, Group 2 contained 25%, Group 3 contains 32%, and Group 4 contains 17% of the total student population.

Table 4.2 presents the teacher response rates, expressed as a percentage of the total faculty, for participating schools (n= 34). Response rates for schools ranged from 7% to 85% of the total faculty. In the absence of actual teacher counts for each school, the criteria to include schools for statistical analysis required *teacher* response rates from schools to be >40%. The criteria was met with the elimination of administrative faculty (represented in the total) and resulted in an additional loss of 4 schools (n=30) and 43 teachers from the sample (n=512 teachers).

Personal Characteristics of Teachers

Table 4.3 describes the personal characteristics of teachers in the sample. A total of 555 teacher responses were received and scanned for an initial set of descriptive statistics. The majority of respondents, 93.9%, were female, 6.1% were male. Teachers that were 20 to 30 years old, represented 19.1% of the total number of teachers surveyed, while 80.9% of the total sample represent teachers 31 years of age or older. In terms of ethnicity, the two largest ethnic groups represented in this study were Caucasian (68.4%) and African American (27.3%).

Table 4.2

Response Rates for Each School in the Sample (n=34 schools)

SCHID	Total Faculty	Teachers	% Response rate
1	58	14	.24*
2	31	17	.55
3	28	13	.46
4	51	8	.16*
5	45	3	.07*
6	27	9	.33
7	21	16	.76
8	25	17	.68
9	27	18	.67
10	27	19	.70
11	30	11	.37
12	29	24	.83
13	19	13	.68
14	27	22	.81
15	29	20	.69
16	27	10	.37
17	23	19	.83
18	18	9	.50
19	13	11	.85
20	31	19	.61
21	28	19	.68
22	37	26	.70
23	32	15	.47
24	14	10	.71
25	27	23	.85
26	55	38	.69
27	45	31	.69
28	43	17	.40
29	32	16	.50
30	73	18	.25*
31	29	10	.34
32	19	16	.84
33	21	11	.52
34	16	13	.81
TOTAL	1,057	555	.53

Note: percentages reflect teacher to total faculty ratios, not teacher ratio of total teachers at the school.

*Schools that did not meet criteria for retention (teacher response rate > 40%)

Table 4.3

Profile of Teacher Sample – Personal Characteristics (n=555 teachers)

Characteristic	Frequency	Percent*
SEX		
Male	33	6.1
Female	509	93.9
Missing	13	NA
AGE RANGE		
20-30	99	19.1
31-40	185	35.6
41-50	110	21.2
51-60	110	21.2
Over 60	15	2.9
Missing	36	NA
ETHNICITY		
African American, Not Hispanic	146	27.3
Hispanic/Latino	2	.4
Asian/Pacific Islander	2	.4
Native American	3	.6
Caucasian, Not Hispanic	366	68.4
Other	16	3.0
Missing	20	NA

* Percent of total group responding

NA means not applicable

Professional Characteristics of Teachers

Professional characteristics of teachers are presented in Table 4.4. Almost sixty-six percent (65.9%) of the teachers responding had baccalaureate degrees, 21.5% had Master's Degrees and 11.6% had Master's Degree + 30. Almost ninety-two percent (91.6%) of the teachers reported that they were certified, of which 87.6% were teaching within the area of their certification. Of teachers in the total sample, 41.2% indicated that they had plans to retire within ten years. Around eighty-six percent (86.1%) of the respondents planned to continue teaching at their current school, while 61% indicated that they had no plans to continue their education.

Table 4.5 presents descriptive statistics by school groups and reflects the range in School Performance Scores and percentages of the total student population (percentage of student population on free and reduced price lunch, percent minority, and percent in need of special education services). School Performance Scores ranged from a group low of 41.48 (Group 4) to a group high of 121.9 (Group 2). The percentage of the total student population on free and reduced price lunches ranged from a group low of 26% (Group 2) to a group high of 94% (Group 4). The percentage of the total student population representing minorities ranged from a group low of 20% (Group 2) to a group high of 93% (Group 4).

Descriptive statistics for each item of the RSCEQ-S, TEBS-S, and TDMS measures was computed for the total sample of teachers. Tables F_1-F_5, in Appendix F, shows descriptive statistics for each measure. Mean teacher response to each item, its standard deviation, minimum and maximum item response, mean as a percent of the maximum, and total variance explained is provided for each measure.

Table 4.4

Profile of Teacher Sample – Professional Characteristics (n=555 teachers)

Characteristic	Frequency	Percent*
HIGHEST EDUC. LEVEL		
1 Less than baccalaureate degree	2	.4
2 Baccalaureate degree	352	65.9
3 Master's Degree	115	21.5
4 Master's Degree +30	62	11.6
5 Educational Specialist	3	.6
6 Doctorate	0	.0
7 Missing	21	NA
CERTIFIED		
Yes	504	91.6
No	46	8.4
Missing	5	NA
TEACHING IN CERTIFIED AREA		
Yes	482	87.6
No	8	12.4
Missing	65	NA
PLANS TO RETIRE IN TEN YEARS		
Yes	225	41.2
No	321	58.8
Missing	9	NA
PLAN TO CONTINUE TEACHING IN CURRENT SCHOOL		
Yes	469	86.1
No	76	13.9
Missing	10	NA
PURSUING CONTINUING EDUCATION		
Yes	213	39.0
No	333	61.0
Missing	9	NA

NA=Not Applicable

Table 4.5

Summary of Descriptive Statistics for Poverty (POV), School Performance Scores (SPS), Percentage Minority, and Percentage of Students Needing Special Education for All Schools and By Group (n=34 schools)

Number of Schools	SPS	% POV	%Min	%SpEd
Total n=34	72.85	72	66	12
SPS/POV HI/HI Group 1 n=12	72.44	93	86	10
Range	57.1-99.3	87.9-97.6	56.6-99.7	4.5-11.9
HI/MID Group 2 n=5	121.91	26	20	14
Range	91.2-130.8	8.6-36.5	9.7-22.2	2.9-28
LO/MID Group 3 n=7	78.66	45	32	14
Range	65.4-85.6	35.9-51.9	8.1-42.8	4.0-18.6
LO/HI Group 4 n=10	41.48	94	93	13
Range	24.7-50.5	88.6-97.6	86.1-100	5.6-20

Note: Each table should be interpreted separately (i.e., some data overlap).

Summary of Factor Analyses Results

A series of factor analyses was completed for the RSCEQ-S (Teachers' Actual Perceptions), the TEBS-S, and the TDMS (Have Opportunity to Make Decision) measures prior to reliability analyses and analyses pertinent to hypotheses and research questions. Traditional interpretations of factors are used to suggest the existence of latent traits; however, in this study factors are interpreted as evidence of the dynamics used by individuals as a frame of reference to construct their beliefs and opinions about their environment (Mislevy, 1996). These results are reported in the next section. Inclusion rules were established that required a minimum of 15 subjects per item on each measure.

Exploratory factor analyses were conducted to identify commonalities among the items written to measure aspects of school culture, teacher self-efficacy, and decision making. Following unconstrained solutions, one to five factors were iteratively extracted for each instrument using principal components analysis and Varimax (orthogonal) rotation procedures. Rules for item retention established were 1) a minimum factor loading equal to or greater than .33, and 2) double loading items (i.e., on multiple factors) were retained only if the difference between the two highest factor loadings, when squared, was equal to or greater than .10. Correlation patterns for each rotated factor structure were interpreted based on their underlying conceptual meaning. Items were retained in solutions based on the criteria established and the greatest total item variance explained, while retaining the greatest number of items within each factor.

Table 4.6 shows the factor pattern structure for the one-factor solution for the RSCEQ-S (Teachers' Actual Perceptions). All 20 items had factor loadings greater than

Table 4.6

Summary of Factor Structure Coefficients for a One-Factor Solution for the Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S) Teachers' Actual Perceptions (n=555 teachers)

Item	Communality Estimates	1 Factor Solution
C1	.40	.63
C2	.31	.56
C3	.36	.60
C4	.40	.63
C5	.46	.68
C6	.37	.61
C7	.51	.72
C8	.34	.59
C9	.32	.57
C10	.40	.64
C11	.47	.69
C12	.43	.65
C13	.52	.72
C14	.49	.70
C15	.40	.63
C16	.54	.74
C17	.43	.66
C18	.38	.61
C19	.49	.70
C20	.42	.65
Variance Explained [a] = 42.2 %		
Final Communality Estimates= 8.45		

[a] Percent of item variance explained by the one-factor solution

Table 4.7

Summary of Rotated Factor Structure Coefficients for the Three-Factor Orthogonal Solution for the Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S) Teachers' Actual Perceptions (n=555 teachers)

Item	Communality Estimates [a]	3-Factor Solution I	II	III
C1	.59	**.74**	.14	.15
C2	.60	.18	.13	**.74**
C3	.52	.16	**.67**	.22
C4	.67	**.81**	.08	.14
C5	.67	.19	.34	**.72**
C6	.53	.21	**.68**	.15
C7	.70	**.78**	.16	.25
C8	.59	.21	.16	**.72**
C9	.55	.13	**.72**	.12
C10	.61	**.74**	.22	.07
C11	.64	.19	.41	**.66**
C12	.58	.17	**.68**	.30
C13	.63	**.71**	.29	.19
C14	.55	.26	**.57**	.39
C15	.61	.14	**.73**	.23
C16	.65	**.72**	.27	.23
C17	.48	.29	.38	**.50**
C18	.48	.31	**.60**	.13
C19	.63	**.73**	.20	.22
C20	.43	.45	.35	.33
Variance Explained [b]		23.3%	20.0%	15.2%

Total Variance Explained [c] 58.4%

Note. Coefficients loading under each factor are in bold.

[a] Sum of squared loadings for this three-factor solution, factored using orthogonal Varimax rotation.

[b] Percent of item variance explained by each factor

[c] Percent of total item variance explained by the three-factor solution

.33 and ranged from .56 to .74. This one-factor solution accounted for 42.2% of the total item variance. The rotated factor structure of a three-factored orthogonal solution provided the best conceptual fit for the items based on eigenvalues, factor loadings, item variance explained and number of items retained (see Table 4.7). Only one item (item 20) failed to meet the minimum criteria for retention. Nineteen items were retained on the RSCEQ-S (Teachers' Actual Perceptions) three-factor solution which explained 58.4% of the total item variance. Seven items retained under RSCEQ-S (Teachers' Actual Perceptions) Factor 1 (identified as the teacher's sense of Shared Leadership) accounted for 23.3% of the total item variance. RSCEQ- (Teachers' Actual Perceptions) Factor 2 was made up of seven items that reflected teacher perceptions about Professional Commitment and accounted for 20% of the total item variance. RSCEQ-S (Teachers' Actual Perceptions) Factor 3 contained five items that described aspects of Collegial Teaching and Learning and accounted for 15.2% of the total item variance.

Factor pattern structure loadings for the one-factor solution for the TEBS-S are presented in Table 4.8. All thirty items loaded at greater than the .33 minimum for item retention. Values ranged from .58 to .74 and explained 43.1% of the total item variance. Orthogonal (Varimax) rotation was used to identify latent constructs.

The rotated (orthogonal) four-factor structure, shown in Table 4.9, was selected based on established criteria and explained 58% of the total item variance. Eight of the 30 items failed to meet the criteria. The six items loading under TEBS-S Factor 1 reflected teacher beliefs in their capabilities related to Classroom Management and explained 15.5% of the total item variance.

Table 4.8

Summary of Factor Pattern Structure Coefficients for the One-Factor Solution for the Teacher Self-Efficacy Beliefs Scale-Short Form (TEBS-S) (n=555 teachers)

Item	Communality Estimates	1 Factor Solution
TEBS-S 1	.36	.60
TEBS-S 2	.33	.58
TEBS-S 3	.38	.61
TEBS-S 4	.40	.63
TEBS-S 5	.42	.64
TEBS-S 6	.48	.70
TEBS-S 7	.42	.65
TEBS-S 8	.40	.63
TEBS-S 9	.40	.63
TEBS-S 10	.43	.66
TEBS-S 11	.42	.64
TEBS-S 12	.47	.69
TEBS-S 13	.38	.62
TEBS-S 14	.40	.63
TEBS-S 15	.44	.66
TEBS-S 16	.47	.69
TEBS-S 17	.40	.63
TEBS-S 18	.48	.70
TEBS-S 19	.40	.63
TEBS-S 20	.43	.65
TEBS-S 21	.47	.68
TEBS-S 22	.44	.66
TEBS-S 23	.49	.70
TEBS-S 24	.36	.60
TEBS-S 25	.48	.69
TEBS-S 26	.45	.67
TEBS-S 27	.44	.66
TEBS-S 28	.49	.70
TEBS-S 29	.55	.74
TEBS-S 30	.45	.67

Variance Explained [a] = 43.1%
Total Communality Estimate= 12.91

[a] Percent of item variance explained by the one factor solution

Table 4.9

Summary of Rotated Factor Structure Coefficients for the Four-Factor Orthogonal Solution for the Teacher Self-Efficacy Beliefs Scale-Short Form (TEBS-S) (n=555 teachers)

Item	Communality Estimates [a]	Four-Factor Solution I	II	III	IV
TEBS-S 1	.70	.25	.10	**.79**	.08
TEBS-S 2	.65	.21	.12	**.76**	.09
TEBS-S 3	.40	.43	.33	.29	.16
TEBS-S 4	.54	**.59**	.40	.13	.11
TEBS-S 5	.56	.44	**.59**	.11	.12
TEBS-S 6	.49	.44	.37	.29	.29
TEBS-S 7	.49	**.53**	.38	.17	.19
TEBS-S 8	.67	**.77**	.20	.17	.08
TEBS-S 9	.59	**.67**	.33	.18	.05
TEBS-S 10	.62	.22	**.71**	.22	.14
TEBS-S 11	.60	.15	**.70**	.23	.19
TEBS-S 12	.55	.18	.36	**.55**	.30
TEBS-S 13	.56	.07	.33	**.64**	.21
TEBS-S 14	.50	.09	.29	.47	.44
TEBS-S 15	.61	.22	**.69**	.13	.25
TEBS-S 16	.64	.30	**.70**	.18	.17
TEBS-S 17	.53	.18	**.59**	.13	.36
TEBS-S 18	.56	.21	.52	.21	.45
TEBS-S 19	.57	.07	.37	.22	**.62**
TEBS-S 20	.70	.20	.18	.19	**.77**
TEBS-S 21	.67	.20	.26	.21	**.72**
TEBS-S 22	.48	.42	.38	.15	.37
TEBS-S 23	.51	.38	.26	.34	.43
TEBS-S 24	.59	**.71**	.08	.15	.24
TEBS-S 25	.68	.29	.16	.23	**.72**
TEBS-S 26	.50	.49	.18	.40	.27
TEBS-S 27	.60	.27	.13	**.65**	.31
TEBS-S 28	.62	.28	.15	**.60**	.40
TEBS-S 29	.56	.44	.29	.40	.35
TEBS-S 30	.62	**.64**	.08	.29	.34
Variance Explained [b]		15.5%	15.4%	13.8%	13.2%
Variance Explained [c]	58.0%				

Note. Coefficients loading under each factor are in bold.

[a] Sum of squared loadings for this four-factor solution, factored using orthogonal Varimax rotation.

[b] Percent of item variance explained by each factor

[c] Percent of total item variance explained by the four-factor solution.

Factor 2 contained six items representing teacher beliefs in their abilities related to their Communication/Clarification skills and explained 15.4% of the total item variance. TEBS-S Factor 3, also contained six items reflecting teacher beliefs about their abilities related to Planning/Accommodating Individual Differences and explained 13.8% of total item variance. Four items loading under TEBS-S Factor 4 were defined as Instilling Higher Order Thinking Skills and explained 13.2% of the total item variance Table 4.10 presents the one-factor solution of the TDMS (Have Opportunity). Item loadings for the one-factor solution ranged from .44 to .66 and accounted for 33.0% of the total item variance.

Following unconstrained solutions, one to five factors were iteratively extracted. Table 4.11 presents the rotated factor structure coefficients for the three-factor orthogonal solution for the TDMS (Have Opportunity) measure. The total item variance explained by the three-factor solution was 48.2%.

TDMS (Have Opportunity) Factor 1 contained eight items that described decisions related to classroom teaching practices (i.e., Core Technology) and explained 19% of the total item variance. TDMS (Have Opportunity) Factor 2 reflected five items that were related to teacher perceptions of their actual involvement in administrative and fiscal decision-making activities (i.e., Operations and Management) and explained 18% of total item variance. TDMS (Have Opportunity) Factor 3 reflected three items that were associated with *who and where* to teacher (i.e., Work Setting and Context). This third decision-making factor explained 11.2% of the total item variance.

Measure subscale dimensions, including the maximum item rating, mean item score and standard deviation ranges, item number and item statements for the highest and lowest item means are presented in Table 4.12. Subscale items for each of the

Table 4.10

Summary of Factor Pattern Structure Coefficients for the One-Factor Solution of the Teacher Decision Making Scale (TDMS) *Have Opportunity* (n=555 teachers)

Item	Communality Estimates	1 Factor Solution
TDM1	.20	.45
TDM2	.19	.44
TDM3	.25	.50
TDM4	.28	.53
TDM5	.36	.60
TDM6	.41	.64
TDM7	.44	.66
TDM8	.32	.57
TDM9	.24	.49
TDM10	.40	.63
TDM11	.33	.57
TDM12	.40	.63
TDM13	.27	.52
TDM14	.43	.65
TDM15	.32	.57
TDM16	.21	.46
TDM17	.42	.65
TDM18	.41	.64
TDM19	.35	.59
Variance Explained [a] = 33.0%		
Total Communality Estimate=6.25		

[a] Percent of item variance explained by the one factor solution

Table 4.11

Summary of Rotated Factor Structure Coefficients for the Three-Factor Orthogonal Solution for the Teacher Decision Making Scale (TDMS) *Have Opportunity* (n=555 teachers)

Item	Communality Estimates [a]	Three-Factor Solution		
		I	II	III
TDM1	.61	.15	.09	**.77**
TDM2	.69	.14	.06	**.81**
TDM3	.41	.09	.38	**.51**
TDM4	.33	.24	.34	.41
TDM5	.49	.15	**.60**	.33
TDM6	.65	.13	**.78**	.14
TDM7	.65	.19	**.78**	.11
TDM8	.49	.16	**.67**	.08
TDM9	.24	**.38**	.23	.22
TDM10	.40	.44	.40	.22
TDM11	.42	.32	**.57**	-.01
TDM12	.40	.45	.44	.12
TDM13	.43	**.64**	.07	.13
TDM14	.51	**.64**	.31	.08
TDM15	.51	**.69**	.06	.18
TDM16	.47	**.58**	-.10	.36
TDM17	.52	**.63**	.35	.01
TDM18	.49	**.63**	.31	.07
TDM19	.42	**.58**	.28	.06
Variance Explained [b]		19.0%	18.0%	11.2%
Variance Explained [c]	48.2%			

Note. Coefficients loading under each factor are in bold.

[a] Sum of squared loadings for this three-factor solution, factored using orthogonal Varimax rotation

[b] Percent of item variance explained by each factor

[c] Percent of total item variance explained by the three-factor solution.

study measures had a maximum possible score of 4. The RSCEQ-S (Teachers' Actual Perceptions), was used to indicate how strongly teachers agreed with statements reflecting the schools' actual professional culture. Scale values ranged from 1= "Strongly Disagree" to 4= "Strongly Agree." Mean scores for the items on the RSCEQ-S (Teachers' Actual Perceptions) ranged from a low of 2.60 for item 19 (Leadership roles are equally shared by teachers and administrators) to a high of 3.35 for item 10 (Administrators visibly encourage teachers to be the best that they can be in the classroom) with standard deviations ranging from .65 to .90. A higher mean indicates the strength of teachers perceptions about the professional element suggested by the item.

The TEBS-S was used to measure the strength of the teacher's personal beliefs in their capability to carry out certain tasks that were aligned with various components of effective teaching. Scale values ranged from 1= "Weak Beliefs" to 4= "Very Strong Beliefs." Mean scores for items on the TEBS-S ranged from a low of 3.10 (Plan evaluation procedures that accommodate individual learning differences) to a high of 3.62 (Maintain a classroom that is fair and impartial) with standard deviations ranging from .57 to .71. A high mean indicates the strength to which teachers believe they can meet the effective teaching component suggested by the item.

The TDMS (Have Opportunity) measure was used to examine activities that represent various levels of decision making and the teacher's perception of their opportunities to actually participate in making them. TDMS (Have Opportunity) subscale values ranged from 1= "Seldom or Never" to 4= "Always or Almost Always." Mean scores for items on the TDMS (Have Opportunity) ranged from 1.38 (Staff hiring) to 3.24 (How to teach) with standard deviations ranging from .75 to 1.04. A

Table 4.12

Summary of Descriptive Statistics for Item Response Including the Maximum Rating, Means, Standard Deviations, Item Number for Lowest and Highest Mean, and Item Statement for the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDMS (Have Opportunity) Measures (n=555 teachers)

Measure/ Subscale	Maximum Item Rating	Ranges M	Ranges SD	Item No.	Statement
RSCEQ-S (19)*					
Shared Leadership (7) *	4	2.60-3.34	.73-.90	19	*Lowest Mean* Leadership roles are equally shared by teachers and administrators.
				10	*Highest Mean* Administrators visibly encourage teachers to be the best that they can be in the classroom.
Professional Commitment (7)	4	2.79-3.18	.65-.74	18	*Lowest Mean* Teachers spend time in professional reflection about their work
				9	*Highest Mean* Teachers believe that all students can learn.
Collegial Teaching and Learning (5)	4	2.78-3.35	.68-.79	17	*Lowest Mean* Teachers feel comfortable in providing suggestions to colleagues about ways in which to improve teaching and learning in the classrooms.
				2	*HighestMean* Teaches are willing to help each other when problems arise.

* Number of items on measure/subscale (Table Continues)

Table 4.12 (Continued)

Measure/ Subscale	Maximum Item Rating	Ranges M	Ranges SD	Item No.	Statement
TEBS-S (22) *					
Classroom Mgt. (6) *	4	3.39-3.62	.59-.71		*Lowest Mean*
				4	Effectively manage routines and procedures for learning tasks.
					Highest Mean
				9	Maintain a classroom that is fair and impartial.
Communicating /Clarifying (6)	4	3.46-3.53	.57-.61		*Lowest Mean*
				16	Clarify misunderstandings or difficulties in learning.
					Highest Mean
				15	Communicate to students content knowledge that is accurate and logical.
Accommodating Ind. Differences (6)	4	3.10-3.35	.66-.71		*Lowest Mean*
				2	Plan evaluation procedures that accommodate individual differences.
					Highest Mean
				28	Improve the academic performance of students, including those with learning disabilities.
Instilling Higher Order Thinking Skills (4)	4	3.22-3.34	.68-.71		*Lowest Mean*
				19	Actively involve students in developing concepts.
					Highest Mean
				13	Utilize teaching aids and learning materials that accommodate individual differences among students.

* Number of items on measure/subscale

(Table Continues)

Table 4.12 (Continued)

Measure/ Subscale	Maximum Item Rating	Ranges M	Ranges SD	Item No.	Statement
TDMS (16) *					
Core Technology (8) *	4	2.29-3.24	.90-1.04		*Lowest Mean*
				14	Student rights
					Highest Mean
				16	How to teach
Operations/ Management (5)	4	1.38-1.93	.75-.99		*Lowest Mean*
				8	Staff hiring
					Highest Mean
				5	Designing or planning the use of facilities
Work Setting/ Context (3)	4	1.82-3.04	1.00-1.04		*Lowest Mean*
				3	Assignment of students to your class (es)
					Highest Mean
				2	The subject (s) or grade levels you are assigned to teach

* Number of items on measure/subscale

higher mean indicates the degree to which teaches actual participate in the decision suggested by the item. An item location index for the three-factor solution of the RSCEQ-S (Teachers' Actual Perceptions), four-factor solution of the TEBS-S, and the three-factor solution of the TDMS (Have Opportunity) measures can be examined in Table F_6 (Appendix F). Item numbers can be cross-referenced with actual item statements comprising the survey measures found in each corresponding Appendix (i.e., RSCEQ-S, Appendix B; TEBS-S, Appendix C; and the TDMS, Appendix D). Conceptual definitions for the subscales identified are provided in each corresponding appendix as well.

Descriptive statistics for all instrument subscales, using schools as the unit of analyses, are presented in Table 4.13. As mentioned earlier, rules for retaining schools in the sample (i.e., teacher response >40%) resulted in the reduction of original schools ($\underline{n}$=34) to $\underline{n}$=30. Means, standard deviations and mean scores expressed as percentages of the maximum possible score are shown for each of the factored subscale dimension of the RSCEQ-S (Teachers' Actual Perceptions), the TEBS-S, and the TDMS. Mean scores, reflected as a percentage of the maximum possible score are provided in order to make comparisons easier, since the number of items vary for each subscale. Teacher actual perceptions of the actual school's professional culture expressed as a percentage of the total possible scores are as follows: Collegial Teaching and Learning (77.4%), Professional Commitment (76.8%), and Shared Leadership (75.9%).

The TEBS-S subscales were used to indicate the strength of teacher's personal beliefs about their capabilities to do carry out tasks associated with effective teaching. Expressed as percentages of the maximum possible score Classroom Management (87.7%), Communication/Clarification aspects (87.3%), Accommodating Individual

Table 4.13

Summary of Instrument Subscale Descriptive Statistics for the Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S) Teachers' Actual Perceptions, Teacher Self-Efficacy Beliefs Scale (TEBS-S), and the Teacher Decision Making Scale (TDMS) Have Opportunity (n=30 schools)

Instrument/Subscale	Max. Possible Score	M	SD	M%Max [a]
RSCEQ-S (19) [b]				
Subscales				
Shared Leadership (7) [c]	28	21.26	4.61	75.9%
Professional Commitment (7)	28	21.50	3.60	76.8%
Collegial Teaching and Learning (5)	20	15.47	2.85	77.4%
TEBS-S (22)				
Subscales				
Classroom Management (6)	24	21.04	2.86	87.7%
Communication /Clarification (6)	24	20.94	2.78	87.3%
Accommodating Individual Differences (6)	24	19.70	3.06	82.1%
Instilling Higher Order Thinking Skills (4)	16	13.12	2.27	82.0%
TDMS (16)				
Subscales				
Core Technology (8)	32	21.26	5.32	66.4%
Operations/Management (5)	20	7.94	3.18	39.7%
Work Setting/Context (3)	12	7.70	2.36	64.2%

[a] Subscale mean score expressed as a percentage of the maximum possible score
[b] Total number of items on the instrument
[c] Number of items on the subscale

Differences (82.1%), and Instilling Higher Order Thinking Skills (82%) reflect a high degree of personal self-efficacy among teachers across the schools examined in this study.

As noted earlier in this chapter, teacher's perceptions about whether they *have the opportunity* and *should have the opportunity* to make various levels of decisions were measured by the TDMS. Of further interest was the sense of decision-making deprivation expressed by teachers. A deprivation index was computed as the difference between responses on the two versions (i.e., *have the opportunity* and *should have the opportunity)* of each question and was labeled as the Teachers' Decision-Making Deprivation Score (TDDS) in this study. Results for schools ($\underline{n}$=30) are reported on Table 4.14. Mean deprivation scores ranged from a low ($\underline{M}$= .37) on decisions of *how to teach*, to a high ($\underline{M}$=1.34) on decisions related to *evaluating teacher performance*. The second highest mean deprivation score ($\underline{M}$=1.08) was related to teacher's desire to be more involved in making decisions about the *textbooks and workbooks that are available*. Higher deprivation scores indicate the degree to which teachers believe they should be more involved in the decision suggested by the item.

Descriptive statistics for each group were also completed. These results are shown on Tables F_7 to F_{10} located in the appendix. For each group, descriptive statistics for each set of measures include group mean response, the standard deviation, and group means expressed as percentages of the maximum possible score.

Summary of Reliability Analyses

Internal consistency reliability coefficients were computed using Cronbach's Alpha procedure for each of the factored subscales of the RSCEQ-S (Teachers' Actual

Table 4.14

Descriptive Statistics for Item Responses to the Teacher Decision-Making Scale (Have Opportunity and Should Have Opportunity) and the Teacher Decision-Making Deprivation Scale Index (n=512) teachers

Item	Have Opportunity Item Means	(SD)	Should Have Opportunity Item Means	(SD)	Deprivation [a] Mean	(SD)
Teacher's assignment to school	2.83	1.05	3.46	.71	.63	.92
Teacher's subject/grade assignment	3.05	1.00	3.60	.63	.55	.91
Student's assignment to class	1.86	1.03	2.75	.92	.89	.96
Designing facilities	1.95	1.01	2.75	.92	.80	.91
Budget development	1.48	.81	2.47	.91	.99	.93
Spending priorities	1.62	.85	2.53	.88	.91	.94
Staff hiring	1.38	.75	2.09	.97	.71	.88
Standardized testing policy	2.92	1.00	3.34	.77	.42	.78
Teacher's performance evaluation	1.52	.91	2.86	.97	1.34	1.10
Reporting student achievement	2.94	1.05	3.43	.72	.49	.86
Student's rights	2.39	1.08	3.09	.80	.70	.86
What to teach	2.64	1.08	3.40	.71	.76	.99
How to teach	3.24	.92	3.61	.64	.37	.76
Textbooks/workbooks available	2.33	1.00	3.41	.69	1.08	1.04
Textbooks/workbooks used	2.57	1.02	3.12	.76	.55	1.09
Staff development	2.57	1.02	3.12	.76	.55	1.02

[a] Positive numbers indicate that desire for participation exceeds actual participation.

Perceptions), TEBS-S, and TDMS measures. Alpha coefficients for each item retained on each measure were calculated for the total sample (n=555 teachers).

Table 4.15 presents the summary of the standardized Alpha reliability coefficients for each of the factored subscales of the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDMS using teachers as the unit of analyses (n=555). The section that follows summarize the results of the reliability analyses completed.

Alpha reliability coefficients for the RSCEQ-S (Teachers' Actual Perceptions) were as follows: Shared Leadership and Vision (7) .90; Professional Commitment (7) Alpha reliability coefficients for the TEBS-S subscales were as follows: Classroom Management/Climate (6) .85; Communicating/Clarification (6) .86; .85, and Collegial Teaching and Learning (5) .82; Accommodating Individual Differences (6) .86; and, Higher Order Thinking Skills (4) .85. Alpha reliability coefficients for the TDMS were as follows: Core Technology (8) .78; Operations/Management (5) .80, and Work Setting/Context (3) .65. Further analysis shows the Alpha level for Work Setting/Context decisions, comprised of three items, would increase .65 to .70, if one of the three items were deleted. Alpha coefficients were lower for those subscales with fewer items retained. Review of Alpha (if item deleted) coefficients showed general consistency for the subscales supporting retention of the items on each factored subscale. These analyses are located in Appendix F (Table F_{12}-F_{14}).

Summary of Intercorrelations

Intercorrelations among the subscales were strong in magnitude and positive in direction. Intercorrelations among the RSCEQ-S subscales were as follows: RSCEQ-S/Shared Leadership and RSCEQ-S/Professional Commitment r=.69, p<.001, two-tailed; RSCEQ-S/Shared Leadership and RSCEQ-S/Collegial Teaching and Learning

r=.78, p<.001, two-tailed; and RSCEQ-S/Professional Commitment and RSCEQ-S/Collegial Teaching and Learning r=.81, p<.001, two-tailed.

Intercorrelations among the TEBS-S subscales were strong in magnitude and positive in direction as follows: TEBS-S/Classroom Management and TEBS-S/Communication/Clarification r=.73, p<.001, two-tailed; TEBS-Classroom Management and TEBS-S/Accommodating Individual Learning Differences r=.74, p<.001, two-tailed; TEBS-S/Classroom Management and Instilling Higher Order Thinking Skills r=.77, p<.001, two-tailed; TEBS-S/Communication/Clarification and TEBS-S/Accommodating Individual Learning Differences r=.68, p<.001, two-tailed; TEBS-S/Communication/Clarification and TEBS-S/Instilling Higher Order Thinking Skills r=.70, p<.001, two-tailed; and, TEBS-S/Accommodating Individual Learning Differences and TEBS-S/Instilling Higher Order Thinking Skills r=.66, p<.001, two-tailed.

Intercorrelations among the TDMS subscales were strong in magnitude and positive in direction as follows: TDMS/Core Technology and TDMS/Operations and Management r=.69, p<.001, two-tailed; TDMS/Core Technology and TDMS/Work Setting/Context r=.59, p<.001, two-tailed; and, TDMS/Operations and Management and TDMS/Work Setting/Context r=.55, p<.001, two-tailed.

Summary of Bivariate Correlations

Bivariate correlation coefficients between the deprivation index (TDDS) of the the RSCEQ-S (Teachers' Actual Perceptions) and the TEBS-S measures, using school as the unit of analysis, are presented in Table 4.16. Significant, inverse

Table 4.15

Summary of Standardized Alpha Reliability Coefficients for the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDMS for Teachers (n=555)

Measure/Subscale	Cronbach Alpha Coefficients
Revised School Culture Elements Questionnaire (RSCEQ-S) (19) [a]	
Subscales:	
Shared Leadership (7) [b]	.90
Professional Commitment (7)	.85
Collegial Teaching and Learning (5)	.82
Teacher Efficacy Beliefs Scale (TEBS-S) (22)	
Classroom Management (6)	.85
Communicating/Clarifying (6)	.86
Accommodating Individual Learning Differences (6)	.86
Instilling Higher Order Thinking Skills (4)	.85
Teacher Decision Making Scale (TDMS) (16)	
Core Technology (8)	.78
Operations/Management (5)	.80
Work Setting/Context (3)	.65

[a] Total number of items for the factor-analyzed version of the instrument in this study
[b] Number of items on the subscale

Table 4.16

Summary of Bivariate Correlation Coefficients Between the RSCEQ-S (Teachers' Actual Perceptions) and the TEBS subscales, and the TDDS index (n=30 schools)

	Teacher Decision-Making Deprivation Scale Index		
	Core Technology	Operations/ Management	Work Setting/ Context
RSCEQ-S (Teachers' Actual Perceptions)			
Shared Leadership	-.75**	-.65**	-.46**
Professional Commitment	-.47**	-.32*	-.21[a]
Collegial Teaching and Learning	-.52**	-.29[a]	-.29[a]
TEBS-Short Form			
Classroom Mgt.	-.16[a]	-.04[a]	-.09[a]
Communication/ Clarification	-.07[a]	.16[a]	.01[a]
Accommodating Individual Learning Differences	-.11[a]	.00[a]	.01[a]
Instilling Higher Order Thinking Skills	-.03[a]	.14[a]	-.06[a]

[a] not significant, p >.05
* Correlation significant at (p< .05, one-tailed)
** Correlation significant at (p< .01, one-tailed)
*** Correlation significant at (p<.001,one-tailed)

relationships were found between the level of deprivation on the three dimensions of the TDDS and those of the RSCEQ-S (Teachers' Actual Perceptions). Significant, inverse correlation coefficients (Pearson's r, $p<.05$, one-tailed) for the TDDS/RSCEQ-S subscales ranged from a low $r = -.32$ [TDDS/(Operations and Management)/RSCEQ/(Professional Commitment)] to a high of $r=-.75$ [TDDS/(Core Technology)/RSCEQ/(Shared Leadership)]. The smaller the teachers' sense of deprivation in the decision-making activities indicated stronger teachers' perceptions of the schools professional culture. There were no significant bivariate correlations between decision-making deprivation and teachers' self-efficacy at the school level.

Table 4.17 reports the bivariate correlation coefficients among the TEBS-S subscales, the RSCEQ-S, and TDMS measures, using schools as the unit of analysis. Positive and statistically significant relationships were found between the TEBS-S dimensions and the RSCEQ-S dimensions. Correlation coefficients (Pearson's *r*) ranged from a low correlation coefficient $r=.33$, ($p<.05$, one-tailed) [TEBS-S/(Classroom Management)/RSCEQ-S/(Collegial Teaching and Learning)] to a high of $r=.61$ ($p<.01$, one-tailed) [TEBS-S/(Classroom Management)/RSCEQ-S/(Professional Commitment)]. There were no statistically significant relationships between TEBS-S dimensions and those of the TDMS (Have Opportunity). Statistically significant, positive correlations coefficients (Pearsons's *r*) were however found between the TDMS (Have Opportunity) dimensions and those of the RSCEQ-S. Correlations coefficients ranged from a low of $r=.33$ ($p<.05$, one-tailed) [TDMS/(Operations and Management)/RSCEQ-S/(Collegial Teaching and Learning)] to a high of $r=.74$ ($p<.01$, one-tailed) [TDMS/(Core Technology)/RSCEQ-S/(Shared Leadership)]. Increases in the strength of teachers' perceptions of their involvement in the daily ***decision making*** activities as measured by

Table 4.17

Summary of Bivariate Correlations Between the RSCEQ-S (Teachers' Actual Perceptions), the TDMS (Have Opportunity) and the TEBS-S measures (n=30 schools)

	Self-Efficacy Beliefs (CM)	(C/C)	(AID)	(HOTS)
RSCEQ-S (Teachers Actual Perceptions)				
Shared Leadership (SL)	.26[a]	.13[a]	.26[a]	.14[a]
Professional Commitment (PC)	**.61****	**.46****	**.53****	**.44****
Collegial Teaching (CT&L). and Learning	**.33***	.23[a]	.34[a]	.25[a]
TDMS (Have Opportunity)				
Core Technology (CT)	.27[a]	.11[a]	.24[a]	.04[a]
Operations and Management (OM)	-.05[a]	-.03[a]	.23[a]	-.01[a]
Work Setting/Context (W/CT	.17[a]	-.03[a]	.17[a]	.06[a]

[a] not significant, p >.05 (Table Continues)

* Correlation significant at (p< .05, one-tailed)

** Correlation significant at (p< .01, one-tailed)

*** Correlation significant at (p<.001, one-tailed)

Table 4.17 (Continued)

	Teacher Decision-Making Scale (Have Opportunity) (CT)	(O/M)	(WS/C)
RSCEQ-S (Teachers Actual Perceptions)			
Shared Leadership (SL)	.74**	.53**	.53**
Professional Commitment (PC)	.55**	.21[a]	.39*
Collegial Teaching (CT&L). and Learning	.62**	.33*	.51**

[a] not significant, p >.05
* Correlation significant at (p< .05, one-tailed)
** Correlation significant at (p< .01, one-tailed)
*** Correlation significant at (p<.001, one-tailed)

TDMS/Operations and Management were linked to increases in their perceptions of the TEBS-S/Collegial Teaching and Learning Environment. Similarly, stronger teachers perceptions of their actual opportunities to decide *what and how to teach* as measured by the TDMS/Core Technology subscale was associated with stronger teacher perceptions of *shared leadership* as measured by the RSCEQ-S/Shared Leadership subscale.

Table 4.18 reports the bivariate correlation coefficients between the subscales of the set of study measures and school performance scores (SPSs). These results indicate statistically significant and positive relationship between the SPS and: the RSCEQ-S/Professional Commitment (r=.51, p<.01, one-tailed), the RSCEQ-S/Collegial Teaching and Learning Environment (r=.31, p<.05, one-tailed); the TEBS-S/Communication/Clarification, (r=.39) and with TEBS-S/Classroom Management (r=.38) (p<.05, one-tailed, respectively).

Additional analyses were completed in order to address the hypotheses and research questions. These results are reported on tables in the following section for each pertinent hypothesis or research question generated.

Restatement of the Hypotheses (H) and Research Questions (RQs)

Six hypotheses and two research questions were formulated and used to guide the quantitative analyses. The first three hypotheses predicted statistically significant, bivariate relationship between the set of subscale measures and the School Performance Score. The fourth predicted a statistically significant negative correlation between teacher feelings of decision-making deprivation and the School Performance Score. Finally, the fifth and sixth hypotheses predicted statistically significant differences in the study's measures in the highest and lowest performing elementary schools.

Table 4.18

Summary of the Bivariate Correlation Coefficients Between the RSCEQ-S (Teachers' Actual Perceptions), the TEBS-S, and TDMS (Have Opportunity) subscales, the TDDS index, and the SPS (n=30 Schools)

	School Performance Score (SPS)
RSCEQ-S (Teachers' Actual Perceptions)	
Shared Leadership	.30[a]
Professional Commitment	.51**
Collegial Teaching And Learning	.31*
TEBS-S	
Classroom Mgt.	.38*
Communicating/ Clarifying	.39*
Accommodating Individual Differences	.18[a]
Instilling Higher Order Thinking Skills	.23[a]
TDMS (Have Opportunity)	
Core Technology	.25[a]
Operations/Management	-.23[a]
Work Setting/Context	.03[a]
TDDS Deprivation Index	
Core Technology	-.21[a]
Operations/Management	-.04[a]
Work Setting/Context	-.05[a]

[a] not significant, p >.05

* Correlation significant at (p< .05, one-tailed)

** Correlation significant at (p< .01, one-tailed)

The first research question examined the degree of variability among the factored subscales that could be explained beyond the variability attributed to poverty of the study population. The second question explored whether some combination (s) of the study variables could be used to predict school performance. The remaining three research questions were used to guide the qualitative analyses. Case studies were completed in order to understanding how and why differences in teacher perceptions relative to the study dimensions are significant. The results for these research questions are presented at the end of Chapter Five. Quantitative results for the hypotheses and research questions are presented next.

Results of Analyses of the Hypotheses (H)

H_1: There is a statistically significant positive bivariate relationship between the RSCEQ-S (Teachers' Actual Perceptions) and the SPS.

The rationale supporting H_1 was provided by prior studies that have shown the quality of leadership and shared visions, collegial teaching and learning environments, and the teacher's professional commitment to be associated with student academic achievement (Wang, Haertel & Walberg, 1993; Cavanagh, 1997). A strong and positive bivariate relationship was expected.

Pearson product-moment correlation coefficients between each of the RSCEQ-S (Teachers' Actual Perceptions) and the SPS was computed using the school as the unit of analysis. Given the small sample size, the bivariate correlation coefficients (n=30 schools) shown earlier on Table 4.18 support the hypothesis to some degree. Correlations coefficients were statistically significant and positive in direction for the SPS and the RSCEQ-S subscale defined as Professional Commitment (PC) (r=.51, p<.01, one-tailed) and the RSCEQ-S subscaled defined as Collegial Teaching and

Learning (r=.31, p<.05, one-tailed). A positive correlation, though not statistically significant, was also indicated between the SPS and RSCEQ-S Shared Leadership (r=.30).

H_2:There is a statistically significant positive bivariate relationship between the TEBS-S and the SPS.

Table 4.18 shows positive and significant correlations (n=30 schools) between the SPS and two TEBS-S subscales: Classroom Management (r=.38, p<.05, one-tailed) and TEBS-S Communication/Clarification subscales (r=.39, p<.05, one-tailed). TEBS-S Accommodating Individual Learning Differences (r=.18) and developing Higher Order Thinking Skills (r=.23) were positively correlated with the SPS as predicted, but were not statistically significant.

H_3: There are statistically significant positive bivariate relationship between the TDMS (Have Opportunity) and the SPS.

The effectiveness of participation in decision making processes has shown positive results to be conditional (Coch & French, 1948, Vroom & Jago, 1978, Saaty, 1982; Hoy & Tarter, 1995). A caveat found in order for participation to be an effective strategy for goal attainment, was that participants must be personally concerned, competent, and generally committed to the desired goals (March, 1994; Hoy & Miskel, 1996). Some of the dimensions of decision making that were found linked to positive outcomes included salience (e.g., personally relevant), efficacy (e.g., beliefs that an impact will be made) and efficiency (e.g., no better alternatives exist) (March, 1994, p. 164). There is also support for the notion that involving competent, interested teachers in decision making improves school effectiveness (e.g., Coch & French, 1948, Vroom & Jago, 1978, Saaty, 1982; Janis, 1979; Johnson, 1991; Hoy & Tarter, 1995). A

significant and positive bivariate relationship between decision-making and SPS was expected.

The data in Table 4.18 show no statistically significant relationships between teacher perceptions that they *should have an opportunity* to participate in decision making activities suggested by the TDMS subscale measure and the SPS. Correlations between the SPS and TDMS/ Core Technology, the TDMS/Work Setting/Context, and the TDMS/Operations and Management subscales ranged from r=.03 to -.23, respectively.

H_4: There are statistically significant negative bivariate relationship between the TDDS and the SPS.

The rationale supporting H_3 applies to H_4. However, in this examination it is expected that the higher the need state (i.e., deprivation), the lower the SPS. This was expected for a number of reasons. One reason for the hypothesis is that if teachers experiences feelings of alienation or lack of participation are strong conditions of the school's professional culture and/or their feelings of self-efficacy may mediate school effectiveness. It was believed, then, that teachers who felt more involved (i.e., low deprivation) in the decisions they value, would be associated with schools demonstrating higher school productivity and school holding power.

The data failed to substantiate the claim made in H_4 that teacher's feelings of decision-making deprivation would correlate with the SPS school effectiveness index. Though negative in direction, as predicted the coefficients ranged from r= -.04 to -.21 TDDS/ Operations and Management, the TDDS/Work Setting/Context and TDDS/Core Technology, respectively.

H_5: There are statistically significant, multivariate relationships among the subscales of the school's professional culture (RSCEQ-S), the teacher self-efficacy (TEBS-S) and decision-making deprivation (TDDS) and the SPS of elementary schools.

Rationale H_5: Prior research supports the notion that these study variables are linked to student academic achievement (Wang, Haertel & Walberg, 1993; Cavanagh, 1997; Bandura, 1997; March, 1994). However, their conceptual and theoretical connection is unclear. H_5 sought to examine the combined affects of the school's professional culture (i.e., shared vision and leadership, collegial teaching and learning, and professional commitment), teacher personal belief systems, and subsequent decisions and behaviors on school performance.

Tables 4.16 and 4.17 presented the bivariate correlation coefficients among the study measure subscales defined in this study. Variations in the strength of teachers' self-efficacy beliefs were correlated with variations in teachers'actual perceptions of the school's professional culture. Statistically significant correlation coefficients ranged from a low between TEBS-S/Classroom Management and RSCEQ-S/Collegial Teaching and Learning ($r = .33$, $p<.05$, one-tailed) to a high between TEBS-S/Classroom Management and RSCEQ-S/Professional Commitment ($r =.61$, $p<.01$, one-tailed). Statistically significant correlation coefficients between selected RSCEQ-S subscales and the TDDS deprivation index ranged from a low between RSCEQ-S/Professional Commitment and TDDS/Operations and Management subscales ($r =-.32$, $p<.05$, one-tailed) to a high between RSCEQ-S/Shared Leadership and TDDS/Core Technology ($r = -.75$, $p<.01$, one-tailed).

In order to determine whether this combination of subscales could be used to explain variations in the school performance score multiple regression analyses was

completed. A simple regression procedure was used to determine whether variations in the set of measures could be shown to predict variation in the SPSs. RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDDS subscales (independent variables) were used to predict variation in the School Performance Scores (SPS) (dependent variable). Results reported in Table 4.19 include the variables entered, values of the multiple correlation coefficient (R), the squared multiple correlation (R^2), F value for the variables entered into the regression equation, and probability for the variables entered.

A standard multiple linear regression was completed regressing the factored subscales of the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDDS (independent variables) on the SPS (dependent variable). The multiple correlation coefficient for the combined RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDDS subscales on the SPS ($R=.67$, $F=1.54$, $p<.20$) was nonsignificant.

Table 4.20 presents the results from the subsequent step completed as a part of the simple standard regression analysis. The RSCEQ-S subscaled labeled *professional commitment* ($R=.51$, $F=10.01$, $p<.004$) was found to be the strongest and only predictor of School Performance Scores entering at Step 1 of the stepwise technique. The coefficient of determination ($R^2=.26$) suggests the linear relationship between SPS and Professional Commitment to be positive and significant, though somewhat weak in magnitude. After adjusting for sample size and number of variables in the model ($R^2=.24$), Professional Commitment explained 24% of the total variance in School Performance Scores.

H_6: There are statistically significant differences in the magnitude of teacher self-efficacy (TEBS-S), school culture (RSCEQ-S), and level of decision-making

Table 4.19

Summary of Standard Multiple Regression of the School Performance Score (SPS) on All Independent Variables (n=30)

All Variables Entered	R	R^2	ΔR^2	F
RSCEQ-S TEBS-S TDDS	.67	.45	---	1.54 [a]

[a] not significant, p >.05

Table 4.20

Summary of Standard Multiple Regression of the School Performance Score (SPS) on Subscales of the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDDS (n=30)

All Variables Entered	R	R^2	ΔR^2	F
Step One				
RSCEQ-S (Teachers' Actual Perceptions)				
Professional Commitment	.51	.26	---	10.00**

** Correlation significant at $p < .01$
No other variables entered at greater than $p < .05$

(TDMS) in the highest and lowest performing elementary schools as identified by their school performance score (SPS).

Rationale H_6 : Differences in the level of teachers self-efficacy, their perceptions of the school's professional culture, and feelings of decision-making deprivation among the highest and lowest performing schools were of interest in this study. The literature suggests that the socioeconomic status of the student population (POV) may have an underlying influence on indicators of school effectiveness (Edmonds, 1979; Brookover & Lezotte, 1977).

It was an assumption of this study there would be significant differences in the teachers' sense of decision-making deprivation between schools in the higher POV/SPS group and the lowest POV/SPS groups. This assumption hinged on two caveats. The first caveat was awareness that teachers with a low sense of decision-making deprivation may have strong shared beliefs (i.e., like-mindedness) about the relative importance given to their involvement in decision-making activities. The second caveat was awareness that teachers with a low sense of decision-making deprivation may have high levels of self-efficacy beliefs (e.g., autonomy) attributable to multiple sources of information from which they find support for their actions to accomplish goals. Still, differences in deprivation were expected that would be attributable not to the POV per se, but rather to the dimensions linked to school effectiveness.

Using general linear model, discriminant function analysis was completed to determine whether group differences on any of the study measures were significant and whether the claim made in H_6 could be supported. Tables 4.21-4.23 present the results, and include one-way ANOVA comparisons of the amount of between-groups variance with the amount of within-groups variance. This was followed by the use of Tukey's

Studentized Range (HSD) test of statistical significance in post hoc multiple comparisons of the mean differences to identify subscale dimensions most able to differentiate group membership. Table 4.21 presents results from the one-way ANOVA technique. Statistics reported include the degrees of freedom, sum of squares, mean squares, F statistic, and probability of error for each study dimension. The data indicate that the variations between the four groups in this study were significantly different on measures of the school's culture and on three of the four dimensions of teacher self-efficacy. Group variations in teacher actual perceptions of the school's culture were significant on dimensions of Shared Leadership ($F_{3, 508}$=5.12, p< .001), Professional Commitment ($F_{3, 508}$-7.55, p<.001), and Collegial Teaching and Learning ($F_{3, 508}$=5.91, p<.001). Group variations were also significant in terms of Teachers' self-efficacy beliefs about their effectiveness in terms of Classroom Management ($F_{3, 508}$=2.57, p<.05), Communication/Clarification abilities ($F_{3, 508}$=4.30, p<.005), and about developing higher order thinking skills ($F_{3, 508}$=5.72, p<.001). However, no variation was found between the four groups in this study on any decision-making dimension.

Results of post-hoc, pairwise, and comparisons of group mean differences using Tukey's (Honestly Significant Differences) statistic to control the rate of Type I experimentwise error were reported in Table 4.22. F values were used to determine whether the assumption of equality of group means for each pair of groups is met.

Results presented in Table 4.23 showed that group differences were statistically significantly (p<.05) for some elements of the school culture as measured by the RSCEQ-S (Teachers' Actual Perceptions). For example, teachers in Groups 2 and 4 differed when comparing their perceptions of Shared Leadership and Vision. Teacher perceptions on dimensions of Professional Commitment were also significantly

Table 4.21

One Way Analysis of Variance of the RSCEQ-S (Teachers' Actual Perceptions) with Group Membership As Predictor (n=4)

Source	df	SS	MS	F
Between Groups				
RSCEQ-S				
Shared Leadership				
Between	3	318.13	106.05	5.12***
Error	508	10524.95	20.72	
Total	511	10843.09		
Professional Commitment				
Between	3	281.43	93.81	7.55***
Error	508	6312.42	12.43	
Total	511	6593.85		
Collegial Teaching and Learning				
Between	3	138.18	46.06	5.91***
Error	508	3959.33	7.79	
Total	511	4097.51		

Note. Alpha =.05, Confidence=0.95 (Table Continues)
*** Correlation significant at p<.001

Table 4.21 (Continued)

Source	df	SS	MS	F
TEBS-S				
Classroom Management				
Between	3	64.29	21.43	2.57*
Error	508	4230.38	8.33	
Total	511	4294.66		
Communicating/ Clarifying				
Between	3	99.65	33.22	4.30**
Error	508	3926.04	7.72	
Total	511	4025.69		
Accommodating Individual Learning Differences				
Between	3	15.93	5.31	0.55 [a]
Error	508	4903.73	9.65	
Total	511	4919.66		
Instilling Higher Order Thinking Skills				
Between	3	85.31	28.44	5.72***
Error	508	2525.10	4.97	
Total	511	2610.41		

Note. Alpha =.05, Confidence=0.95 (Table Continues)

[a] not significant, p >.05

* Correlation significant at p< .05

** Correlation significant at p< .01

*** Correlation significant at p< .001

Table 4.21 (Continued)

Source	df	SS	MS	F
TDM				
Core Technology				
Between	3	145.15	48.39	1.72[a]
Error	508	14323.32	28.20	
Total	511	14468.48		
Operations/Management				
Between	3	88.80	29.60	2.96*
Error	508	5077.34	9.99	
Total	511	5166.14		
Work Setting/Context				
Between	3	2.55	0.85	.15[a]
Error	508	2850.66	5.61	
Total	511	2853.21		

Note. Alpha =.05, Confidence=0.95

[a] not significant, p >.05

* Correlation significant at p< .05

Table 4.22

Tukey's Studentized Range (HSD) Test for RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDMS (n=4)

Variables	Group Comparisons	Lower Confidence Limit	Difference Between Means	Upper Confidence Limit	
RSCEQ-S					
Shared Leadership and Vision					
	G2 - G4	0.8563	2.6672	4.4780	*
Professional Commitment					
	G2 - G1	0.1799	1.4880	2.7961	*
	G2 - G3	0.5580	1.9455	3.3329	*
	G2 - G4	1.1102	2.5126	3.9150	*
Collegial Teaching and Learning					
	G2 - G4	0.1857	1.2964	2.4070	*
TEBS-S					
Classroom Mgt.					
	G2 - G3	0.0356	1.1714	2.3073	*
Communicating/ Clarifying					
	G2 - G4	0.0344	1.1404	2.2464	*
	G2 - G3	0.2955	1.3897	2.4839	*
Accommodating Individual Learning Differences	--	--	--	--	
Instilling Higher Order Thinking Skills					
	G2 - G3	0.4359	1.3135	2.1910	*
TDMS					
Core Technology	--	--	--	--	
Operations/Mgt.	--	--	--	--	
Work Setting/ Context	--	--	--	--	

Note. Alpha =.05, Confidence=0.95

* Difference significant at $p<.05$

different between Group 2 and Groups 1, 3, and 4, respectively. Teacher perceptions of the Collegial Teaching and Learning environment were also significantly different in Groups 2 and 4.

Teacher self-efficacy beliefs, as measured by the TEBS-S, in their capabilities that were labeled Classroom Management were significantly different between Group 2 and Group 3. Teacher beliefs in their capabilities labeled Communicating/ Clarifying classroom expectations also differed between group 2 and groups 3 and 4.

Table 4.23 presents the discriminant function coefficients generated for each group. Coefficients cannot be compared across groups, but do provide an indication of the magnitude for each subscale. Once these discriminant weights were completed, classification function coefficients were computed for each of the 4 groups in this study. Results are shown on Table 4.24. While the discriminant function model correctly classified 72% of the schools in Group 1, only 43.8% of the total of sample schools was correctly classified into the SPS/POV groupings.

Results of Analyses of Research Questions (RQs)

RQ_1: How much of the variation in the school performance scores can be explained by school mean scores on the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDDS beyond that accounted for by the socioeconomic status of the student population (POV)?

Stepwise regression technique was completed to answer research question one. Table 4.25 reported the multiple correlation coefficient, total variance explained, F and p values at each step. POV was the first variable to enter the regression equation (R=.63, F=18.25, p<.001). At step two, Professional Commitment entered as the second strongest predictor given the first (R=.72, F=14.69, p<.001). The Collegial

Table 4.23

Linear Discriminant Function Model Classification Function Coefficients of RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDMS (Have Opportunity) for Group Membership (n=4 Groups)

GROUP	G1	G2	G3	G4
CONSTANT	-47.38135	-51.66941	-46.40795	-45.15558
Shared Leadership	0.21144	0.25325	0.19941	0.14610
Professional Comm	0.62879	0.71629	0.46114	0.53641
Collegial Teaching And Learning	0.54428	0.54289	0.83239	0.63385
Classroom Management	**0.95580**	**1.04920**	**0.98498**	**0.97074**
Communication/ Clarification	**1.44659**	**1.47609**	**1.36450**	**1.37328**
Accommodating Individual Learning Differences	0.31631	0.15398	0.37346	0.33195
Instill Higher Order Thinking Skills	0.09300	0.20049	-0.06968	0.10412
Core Technology	0.23334	0.32248	0.28710	0.22704
Operations/ Management	-0.21923	-0.35797	-0.27293	-0.07257
Work Setting/Context	**0.89164**	**0.85087**	**0.85450**	**0.81574**

Table 4.24

Linear Discriminant Function Analysis Classification Results and Predicted Group Membership (n=4 Groups)

Actual Group	No. of Cases	Classification results Predicted Group Membership 1	2	3	4
Group 1	196	142	8	28	18
		72.4%	4.1%	14.3%	9.2%
Group 2	64	46	7	10	1
		71.9%	10.9%	15.6%	1.6%
Group 3	130	70	3	49	8
		53.8%	2.3%	37.7%	6.2%
Group 4	122	68	1	27	26
		55.7%	.8%	22.1%	21.3%

Note. Percent of "grouped" cases correctly classified: 43.75%

Multivariate Statistics and F Approximations

Statistic	Value	F	DF
Wilks' Lambda	0.813	3.55 ***	30
Pillai's Trace	0.197	3.52 ***	30
Hotelling-Lawley Trace	0.216	3.59 ***	30
Roy's Greatest Root	0.118	5.91 ***	10

Note. F Statistic for Roy's Greatest Root is an upper bound.

*** Differences significant at $p<.001$

Table 4.25

Summary of Stepwise Regression of the School Performance Score (SPS) on Subscales of the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDDS (n=30)

Variables Entered	R	R^2	ΔR^2	F
Step 1				
POV	.63	.40	--	18.25***
Step 2				
RSCEQ-S (Teachers' Actual Perceptions)				
Professional Commitment	.72	.52	.12	14.69***
Step 3				
TEBS-S				
Collegial Teaching and Learning	.79	.62	.11	14.29***

*** $p<.001$

Teaching and Learning environment also entered the equation as the third strongest predictor, given the first two predictors (R=.79, F=14.29, p<.001). No other variables entered the equation as significant at the .05 level for entry into the model. This particular model accounted for 62% of the total variation in School Performance Scores.

RQ_2: Is there some combination of the study variables that measures Teachers' perceptions (i.e., about school culture, beliefs in personal capabilities, and level of involvement) that can be used to discriminate between high and low performing schools?

General linear model procedures were followed in completing the discriminant function analysis statistical technique to predict POV/SPS (criterion) groups. Predictors variables included the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, TDMS (Have Opportunity) subscales. A four group model was built using one way ANOVA procedures and Tukeys' HSD to identify statistically significant group distances and variables describing group differences. Four groups were categorically and nominally scaled into High/Low POV/SPS categories. Given the groups sample size, teachers' mean scores on the item subscales were used to predict group membership. As previously shown on Table 4.24, teachers were correctly classified into Group 1 (high poverty, high performing schools) in 72% of the cases. Considering all groups, and scores on the variables in the study, only 42.75% of the cases were correctly classified. The probability of correct classification depends upon the proportion of cases (relative to the total) that were known "priors" in each POV/SPS Group.

Research questions 3 through 6 were answered as a part of Phase III analysis presented in Chapter Five.

Supplemental Data Analyses

Though differences were found to be significant between groups in order to determine the magnitude of those differences effect size calculations were completed. Effect size calculations are helpful for understanding the magnitude of group differences. Effect Size (ES) was derived in this study by dividing the difference between group means by their average standard deviations. Tables 4.26 and 4.27 present the effect size for each of the subscale mean scores on the RSCEQ-S (Teachers' Actual Perceptions) and TEBS-S measures, respectively. There were no significant group differences found on any of the TDMS/TDDS subscales.

Table 4.26 showed the overall effect size (ES) of group differences to be low. However, the ES was highest for RSCEQ-S (Teachers' Actual Perceptions) measure between Groups 2 (relatively high performing, lower poverty) and 4 (low performing, high poverty). Group differences measured by the RSCEQ-S (Teachers' Actual Perceptions) were shown to be greatest on all three professional culture subscales: Shared Leadership (ES=.20), Professional Commitment (ES=.41) and Collegial Teaching and Learning (ES=.35).

Of interest in this study is that teacher responses in Group 1, initially labeled *demonstrably effective* for having mid to high percentages of poverty and relatively higher school performance, did not differ significantly from teacher responses in any group on any RSCEQ-S subscale. Group 3 was to be initially labeled as the *demonstrably ineffective* group for having low percentages of poverty and low school performance. Since the schools actually participating did not fit this category the *average school* was described. Teacher responses from Group 3 differed only from

those in Group 4 in terms of the level of the Collegial Teaching and Learning environment.

Table 4.27 showed ES of group differences as measured by teachers' self-efficacy beliefs. Greatest effect size was indicated between Group 2 and Groups 3 and 4 on three of the four Teachers' Self-Efficacy Beliefs (TEBS-S) subscales. For example, the TEBS-S subscale effect size between Groups 2 and 4 were greater on the following dimensions: Classroom Management (ES=.36), Communicating/Clarifying (ES=.65) and Instilling Higher Order Thinking Skills (ES=.27). Group effect size differences between Group 2 and Group 3 were greatest on the following dimensions: Classroom Management (ES=.37), Communication/Clarification (ES=.48), and Instilling Higher Order Thinking Skills (ES=.34). According to the sample data in this present study, effect size calculations between all four groups on dimensions of the Teacher Decision-Making Scale (TDMS) resulted in values less than .2 and were not reported.

Effect size calculations provide another way of determining the magnitude of the differences. In this study, these calculations helped provide a more accurate picture about differences identified as statistically significant by indicating the degree of difference between the groups in a standardized format.

Chapter Summary

Chapter Four presented the quantitative data analyses completed for Phase II of this study. In addition, the hypotheses and research questions pertinent to Phase II of the study were addressed and results presented. Supplemental data analyses were completed in order to determine the effect size of group differences found on the

Table 4.26

School Culture in Demonstrably Effective and Ineffective Schools as Measured by Effect Size for the RSCEQ-S (Teachers' Actual Perceptions) Subscale Measures (n=30)

Group	SL [a]	PC [b]	CT&L [c]
1 and 2	-0.191	-0.379	-0.228
1 and 3	-0.154	-0.047	-0.215
1 and 4	0.011	-0.010	0.059
2 and 3	0.027	**0.443**	-0.058
2 and 4	**0.204**	**0.417**	**0.347**
3 and 4	0.166	0.040	**0.304**
1 and 4	0.011	-0.010	0.059

Note. Effect Size = (e.g., Group 1 M - Group 2 M) /(Group 1 SD + Group 2 SD) /2

[a] SL=Shared Leadership
[b] PC=Professional Commitment
[c] CT&L=Collegial Teaching & Learning

Table 4.27

Teacher Self-Efficacy in Demonstrably Effective and Ineffective Schools as Measured by Effect Size for the TEBS-S Subscale Measures (n=30)

Groups	CM [a]	C/C [b]	AID [c]	HOTS [d]
1 and 2	-0.322	-0.326	0.033	-0.151
1 and 3	0.055	0.146	0.043	0.224
1 and 4	0.017	0.170	-0.033	0.117
2 and 3	**0.370**	**0.479**	0.007	**0.341**
2 and 4	**0.359**	**0.645**	-0.067	**0.265**
3 and 4	-0.041	-0.018	-0.079	-0.135
1 and 4	0.017	0.170	-0.033	0.117

Note. Effect Size = (e.g., Group 1 M - Group 2 M) /(Group 1 SD + Group 2 SD) /2

[a] CM=Classroom Management
[b] C/C=Communication/Clarification
[c] AID=Accommodating Individual Learning Differences
[d] HOTS= Higher Order Thinking Skills

study measures. Results from the supplemental data analyses were presented. Chapter Five presents the results of the qualitative analyses completed in the study and answers to the remaining research questions originally reported in Chapter One.

CHAPTER FIVE: SUMMARY OF QUALITATIVE RESULTS

Overview

The conceptual model used to guide the study (see Chapter One, Figure 1) presented constructs that represented cognitive and affective process dimensions that mediate school effectiveness. School effectiveness was presented not only as an outcome in the model, but also as a source of feedback affecting individual perceptions and behavior. In order to better understand these mediating processes, the school's professional culture, teacher self-efficacy, and level of teacher involvement in decision-making were first measured quantitatively (see Chapter Four), then explored qualitatively.

Chapter Five presents the results from Phase III (the qualitative phase) of the study with relevant quantitative data included for purposes of comparison. Presented are the following:

1) sampling procedures,
2) procedures for conducting case studies and methodological issues,
3) criteria for interpreting the data,
4) individual case study reports (Pilot Jr. High, High Flyer Elementary, and Goodwill Elementary),
5) cross-case analyses to understand differences and similarites, and
6) cross-case analyses to answer research questions.

Phase III was deemed important for not only assessing the construct validity of the study dimensions through methods triangulation, but also for understanding how and why culture, self-efficacy, and decision-making differ in *demonstrably effective and ineffective* schools. Comparative analysis was utilized to determine the

quality of data convergence of the quantitative and qualitative results in order to enhance the credibility of the overall findings (Patton, 1990).

Sampling Procedures

Schools were chosen for further in-depth study based on three criteria: 1) their being the best representative of the SES/SPS group into which they were originally categorized, 2) willingness to participate, and 3) quantitative differences proved to be statistically significant.

A preliminary step was completed prior to school site visits. Though not a part of the sampling unit, a pilot case study school was selected to help finalize development of the focus group protocol and to test the contextual observation checklist that was used. The pilot school was selected based on the teacher's familiarity with the study dimensions. and particularly with the concept of self-efficacy. A group of six teachers were asked to respond and comment on the preliminary focus group protocol in order to establish face and content validity of the protocol questions. It was determined that the protocol represented a set of reasonably questions that would capture the teacher perceptions of school culture, teacher self-efficacy, and decision-making. The focus group protocol packet (including the contextual observational checklist) used in this study is located in Appendix E.

Phase III of the study builds upon the significant quantitative findings of Phase II. As mentioned in Chapter Four, group differences on selected study dimensions were statistically significant, but the differences in terms of their magnitude seemed somewhat questionable. Though significant, the differences in

mean subscale scores among groups as measured by their mean subscale scores represented only a 1 to 3 point difference.

Supplemental data analyses were completed in order to determine the magnitude of the differences by calculating the effect size (ES) of subscale differences. Effect size is calculated by dividing the differences between mean subscale scores by their average standard deviations. The higher the ES, the greater the difference in the subscale scores between the two groups examined. Overall effect sizes for the study measures were low (see Tables 4.29 and 4.30 in Chapter Four). In part, overall low ES on the study dimensions may be due to the fact that teachers actually completing the study survey represented schools with average to high poverty conditions, as well as average SPSs. Effect size calculations indicated that the magnitude of the differences were greatest on selected subscale measures among Group 2, Group 3 (representing schools labeled *demonstrably ineffective*), and Group 4. Specific effect size results were reported in Chapter Four (see Tables 4.29 and 4.30).

Discriminant function analysis, using teachers as the units of analysis, showed that the study variables examined in this study best predicted teacher responses in Group 1 (representing school labeled *demonstrably effective*) (i.e., 75% of the teachers were correctly classified into Group 1). Group 1 schools represented higher performing, high poverty schools. According to this analysis, the two most discriminating variables found were school culture (as measured by professional commitment) and teacher self-efficacy (as measured by beliefs in the ability to communicate and clarify expectations for learning in the classroom).

A simple regression analysis of the school performance score on all subscale dimensions was completed. The multiple correlation (R=. 56, F=10.01, p<. 05, two-tailed,) among the study dimensions indicated that professional commitment was the dimension most highly correlated with the school performance and accounted for 26% of the total variance in SPSs among schools in the sample.

Only two schools met all three sampling criteria set for Phase III of this study mentioned at the beginning of this section. One school selected represented the context for Group 2 schools (high performing/low poverty) and the other school represented the context for Group 4 schools (low performing/high poverty).

Teachers who were invited to participate in the one-hour focus group sessions were chosen based on a stratified, random sampling technique to represent each grade level and subject area taught. School contacts were asked to ensure that the participants were those that filled out the teacher survey administered at the end of the last school year. Teachers actually participating in the study were asked to clarify and/or discuss unclear responses during the interview sessions to help ensure the accuracy of their responses.

Procedures for Conducting Case Studies and Methodological Issues

Focus group sessions were informal and designed to be tape-recorded unless there was an objection. Participants were assured that confidentiality and anonymity would be maintained in order to enhance the quality and openness of their responses. Focus group discussions were guided using a semi-structured interview protocol conceptually aligned with the RSCEQ-S, TEBS-S, and TDMS measures, with some allowance made for digression in discussion. The study

measures are located in Appendices B, C, and D, respectively. The protocol packet is located in Appendix E.

Methodological issues arose during the development of the focus group protocol. The two most prevalent issues were setting the criteria for the interpretation of the qualitative results and determining the level of evidence necessary for answering the research questions. A preliminary step taken to address these concerns was to establish face and content validity of the focus group protocol and its alignment to the RSCEQ, TEBS-S, and TDMS measures. Three colleagues, familiar with the study constructs, provided expert opinions and preliminary content analysis of the protocol questions related to the RSCEQ-S, TEBS-S, and TDMS conceptual definitions. The protocol was then used to conduct a focus group discussion with six teachers in the pilot case study.

Phase III of the study enhanced the quality and credibility of the study findings by utilizing a different data collection technique. Denzin (1970:313 in Patton, 1990) explained that combining data sources helps reduce "the intrinsic bias that comes from single-methods...studies." The purpose for conducting the pilot study was to streamline and/or clarify questions on the protocol so that differences and similarities in teacher perceptions could be determined. Teachers in the pilot study provided additional feedback about the relevance, clarity, and quality of the proposed questions. As a result of this preliminary activity, it was determined that the focus group protocol was appropriate for it's stated purposes. While the pilot group provided useful baseline data, it was not be included in later school comparisons because the school was not a part of the sampling unit.

The processes for establishing the criteria and evidence for interpreting the results may be somewhat biased by the researcher as a data collection instrument in terms of what has been deemed noteworthy. These problems, however, were at least partially addressed by carefully maintaining the tape recordings, transcribed notes, field notes, and documentation collected at each site.

Criteria for Interpretation of the Data

Conceptual definitions of the study variables were used to develop the protocol questions and used to document the mediating affects expressed by teacher's statements and behaviors. These definitions were used to provide the basic criteria for making judgments about the professional school culture, teacher's self-efficacy, and involvement in decision-making. A review is presented next.

Professional School Culture

Shared Leadership

The level of ongoing interactive processes involved at each school that explain how school goals are accomplished was used to describe *shared leadership* in this study. The dynamics of interpersonal roles and relationships among organizational members are grounded in norms, values, and beliefs reflecting cooperation, sharing, support provided by the individuals. Examples of shared leadership sought included the level of mutual encouragement expressed, support observed in carrying out work tasks, and level of mutual sensitivity to the problems and difficulties expressed among colleagues.

Collegial Teaching and Learning

In this study *collegial teaching and learning* was conceptualized as a dynamic process of continual professional growth. During this process, teachers

were expected to express value in this process by prioritizing their activities and acting on their need for ongoing learning in ways that enhanced their own teaching and learning. Teachers were expected to have views about their collaborative efforts as not only a personal benefit, but benefit for all students and staff at the school. Some examples of collegial teaching and learning include: collaborative work on projects targeting goals and objectives for teaching and learning, shared planning, personal and group reflection, dialogues among teachers, and the incorporation of educational research into their practice and visions for the future.

Professional Commitment

Professional commitment referred to the shared values expressed among teacher's that reflected the extent to which learning was pursued and applied as a way of life. The teachers' commitment to the learning process was expected as an observation of the degree to which teachers shared resources and served as a source of help and support for colleagues within the organization.

Teacher Self-Efficacy Beliefs

Classroom Management/Climate

Teacher effectiveness was described in terms of the teacher's belief in their ability to *maintain a classroom environment that maximized learning* through high levels of student engagement in learning tasks for all students. Examples of effective teaching included teacher perceptions of positive interpersonal classroom relationships between the teacher and students, teacher comments that were free from sarcasm, ridicule, and derogatory reference, teachers who express enthusiasm for teaching, patience with learners, and who provide opportunities for all learners to succeed.

Communication/Clarification

Teacher effectiveness was described in terms of the teacher's belief in their ability to use informal, as well as formal assessments of pupil learning. Effective teachers would feel able to incorporate both general and specific feedback in ways that indicated the student understanding. Examples of effective teaching included teacher's beliefs in their ability to identify minor confusion and/or student need for assistance through verbal and nonverbal cues expressed from learners. In addition, teachers would believe that they were familiar with different techniques that enhance understanding as well as alleviate misunderstanding.

Higher Order Thinking Skills

Teacher effectiveness was described as the teachers' belief in their ability to *develop higher cognitive skills* in learners. Effective teaching represented an understanding of the need to create meaningful associations between ideas and multiple learning styles. Examples of the ability to develop higher order cognitive skills included the teacher's belief in their own personal competency in terms of both content knowledge and motivation to involve all learners in activities such as critical analysis, problem solving, and concept development.

Accommodation of Individual Differences

Teacher effectiveness was described as the teacher's beliefs in their ability to plan, implement, and evaluate the usefulness of techniques that provide opportunities for learning and of activities that *accommodate individual learning differences* among students. Teachers would feel they were familiar with the techniques used to accommodate a range of individual learning differences and methods that provide an appropriate pace for individual learning. Teachers would

believe they were skilled in the use of teaching aids and learning materials and in the ability to provide a learning environment that accommodates all learners, including those with learning disabilities.

Teacher Decision Making

Core Technology

Decisions that directly affect the teacher's effectiveness to improve classroom practices were used to describe the *core technology*. How often teachers actually participate in decisions that ultimately affect classroom practice was used to reflect the level of cultural support for the development of the teachers' professional capacity. Examples of decisions that represent teacher involvement in the core technology included such things as evaluation of teacher performance, reporting progress, what to teach, how to teach, what materials to use, and staff development opportunities.

Operations/Management

Decisions that provided teachers with opportunities to collaborate with others about how to bring about goals were described as *operations and management*. How often teachers helped facilitate decisions about spending priorities, strategies sessions for goal attainment, or effective class scheduling was used to gauge the depth of teacher involvement beyond the classroom. Examples of decisions presented to teachers included: the uses of facilities, budget development, expenditure priorities, staff hiring, and testing policies.

Work Setting/Context

Decisions about how to effectively reassign staff involve the use of the teachers as professionals in developing strategies that affect school productivity, as

well as school holding power. This dimensions was used to determine the level to which teachers perceived themselves as disconnected from decisions that target overall school improvement. Examples of decisions reflecting the *work setting/context* for teaching and learning included: school assignments, subject or grade levels taught, and students that were assigned to teachers.

Given the conceptual definitions just reviewed, the individual case studies presented next provide the results from the interviews and school observations. For each case study, relevant quantitative data and the contextual overview of the school is presented. After the contextual information is shared, school profiles based on teacher perceptions for each study measure are presented. Aspects of the prior year's School Improvement Plan and summary of the findings conclude each report.

Individual Case Study Report (Pilot Junior High)

The following sections provides: 1) relevant quantitative data, 2) contextual overview, 3) profile of teacher perceptions of the school culture, self-efficacy beliefs, and decision making, and 4) summary of the related findings for Pilot Junior High an *Academically Above Average* (SPS= 85.9) public school with mid-range poverty (35.7% of the total student population on free and reduced price lunches).

Relevant Quantitative Data

There are approximately 825 students and 45 faculty members at Pilot Junior High. Of the total student population, 6.9% were minority and 8.8% were in need of special education. Average daily attendance in October, 1999 was 754. School performance scores were made up of indices that give weights for LEAP 21 performance, Iowa Test of Basic Skills (ITBS), attendance rate (with or without dropout rate depending on grades 7 and 8 in schools), and the dropout rate. The

school's performance score of 85.9 in 1998-99 rose 10.3 points to 96.2 in 1999-2000. Pilot Junior High is labeled *Academically Above Average*. However, it is the state's goal for each school to reach scores of 100 within ten years. As a matter of interest, scores ranging from 100 to 124 earn the label *School of Academic Achievement*.

Changes in the School Performance Score (SPS) reflected several improvements by Pilot Junior High on the indices for this school. For example, the index reflecting student performance on the Leap 21 criterion-referenced test, which ranged from 0 to 120, rose from 46.8 to 54.5 from 1998-99 to 1999-2000. This particular index counts for 60% of the total School Performance Score (SPS) derived. The index reflecting student performance on the ITBS remained constant at 29.5, and counts for 30% of the SPS. Average daily attendance in 1998-99 was 754 (826 enrolled). The attendance index ranged from 0 to 9.2 for schools with grades 7 and 8. Pilot's attendance index dropped from 3.3 to 2.4 showing some drop in student attendance. However, the dropout index, which ranged from 0 to 10, rose for Pilot Junior High from 6.3 to 9.8.

Pilot Junior High was selected to test the focus group protocol and contextual observation checklist used in the study. Though quantitative results on the RSCEQ-S, TEBS-S, and TDMS were not available for Pilot Junior High, the input from these teachers enhanced the quality and credibility of the study through data triangulation (i.e., methods) as described in Patton (1990). Specifically, this step ensured that the protocol questions were aligned with the conceptual understanding of the study measures and that the protocol could be used an additional data

collection strategy for reducing "intrinsic bias that comes from single methods...studies" (Denzin, 1970:313 in Patton, 1990).

Contextual Overview of Pilot Junior High

The school site was selected to test the focus group protocol and contextual observation checklist because of the teachers' familiarity with the concepts of school culture and self-efficacy. Six eighth grade teachers, chosen by stratified random sampling technique, represented Math/Science, Reading, English, and Physical Education, agreed to share their thoughts and opinions about a series of questions. A one-hour focus group session was scheduled, and a preliminary protocol used to guide the discussion on topics the reflect teachers' perceptions of the school's professional culture, sources of teachers' self-efficacy, and sense of decision making (Appendices B, C, D, and E, respectively).

The purpose for conducting the pilot study was to streamline and/or clarify focus group questions that might reflect differences and similarities in teacher perceptions related to the study variables. This particular group of teachers provided additional feedback about the relevance, clarity, and quality of proposed questions. As a result of this activity, it was determined that the focus group protocol was appropriate for it's stated purposes. While the pilot group provided baseline data, results will not be compared with the other case study schools.

Pilot Junior High (Grades 6-8) is located in a newly constructed building in an urban fringe of a mid-sized town in the southern region of the state. The downtown area nearby is well known for its numerous antique shops. The school was surrounded by chain linked fencing. The paved parking lot was spacious and clean. Adults were present at the front of the school to greet and direct students

arriving on the campus. Student transition into the school building was orderly as evidenced by students going directly to class with little coaxing needed from adults. Interactions among students and adults were pleasant and friendly.

Doors leading to the office opened into a wide foyer. One-way glass on the office doors allowed office personnel to view activities taking place in the foyer. This gave the observer a sense that extra security was being provided. The implied need for such an extra layer of security brought to the forefront recent images of school shootings across the nation and heightened awareness of the added, though latent, stress factor on school personnel to provide more than a mere 'sense' of safety. This observation was deemed of interest for its reflection of the leadership and attention to the school environment.

The foyer was used to house trophy display cases, the overwhelming majority of which contained plaques of honor roll students. Athletic trophies were displayed in the cases as well (e.g., football and baseball), but were less predominant than those reflecting the academic success of the student population.

Hallways were wide, clean, and free of debris. There were no hallway lockers at the school. The janitor was observed sweeping the hallways, while students were in class. Teachers were observed informally sharing ideas during blocks of time in which there were no classes. The library was not in use at the time of the visit, but conditions were clean and equipment and books appeared to be in good condition.

The band and choir rooms were located away from other classes and were in use. Just outside this area, on the bulletin board, were evaluations reflecting a running record of positive band evaluations from various competitions.

The computer lab was busy, with lots of student engagement. Friendly teacher-student relationships were evident. The teacher was overheard teasing one of the students returning to the classroom with forms from the office saying, *Yaaa Mule* then made the sound of a whip as the student returned to their work station. Students freely asked the teacher questions from their seats and all were very involved in the activity that had been assigned.

Faculty to student interaction, casually observed in the hallway, was friendly and mutually respectful. One teacher was overheard complimenting a student for a task completed earlier. The teacher was making plans with that student for class activities later in the day.

One room provided in-school peer tutoring where the student was observed writing on the board and explaining how to solve a problem to students in the room. Learners watched intently. Windows enclosed the cafeteria, which on the day of the visit served a dual purpose as practice area for an upcoming drama.

The atmosphere conveyed a strong sense of orderliness. That is, everyone seemed to have a place and appeared highly engaged. For instance, the staff on bus duty was attentive to students as they arrived, janitors were mopping the hallways, cafeteria workers were preparing for lunch, the librarian was researching a topic and both band and choir classes were in session. The interactions among students, as well as those between adults and student conveyed a sense of congeniality and respect.

Profile: School Culture at Pilot Junior High

Elements of the school's professional culture were explored in terms of shared leadership, teacher's professional commitment, and degree of collegial

teaching and learning. Evidence of culturally embedded aspects that reflect a supportive learning organization was sought.

In order to determine how teachers perceived the quality of shared leadership and vision, they were asked whether they were aware of the school performance score (the focus of improvement) and about any noticeable changes in the school administration (supportive structures provided). Teacher perceptions of the school culture as conveyed in this pilot study indicated views of administration as facilitative, supportive, and actively engaged. Teachers were not readily aware of the school's performance score and whether or not they had met the growth target set by the state. However, after a few minutes of discussion teachers did overestimate the score to be over 100 and that the 10-year growth target had been met.

Administrators were viewed as more involved in facilitating the teacher's role to teach than had been the case in the past. For example, the principal meets weekly with teachers to discuss school-related issues. In terms of shared leadership, teachers expressed that their greatest responsibility was for what happened in the classroom and indicated they were *regularly* asked for feedback from the administration on everything from planning extracurricular events to how to deal with current problems. Teachers viewed accountability and high stakes testing as responsible for increased administrative involvement.

Professional commitment was evident by the level of involvement in activities to continue their formal education and by activities through which they maintained awareness of the latest available techniques, strategies, and resources that improve the quality of their teaching. Teachers indicated that the Internet had

proved to be a great resource for finding materials regularly used. Access to external resources of support served to help these teachers envision state of the art classrooms for which they strove to attain. Professional commitment was also explored by inquiring about the barriers teachers faced when seeking and/or serving as an educational resource. Teachers were quick to respond that they perceived no barriers. After some thought however, they indicated that one recent barrier, due to the recent move into a new location, was a reduction in access to other teachers. This barrier was attributed to the new school being larger and to the physical layout that was not as conducive for informal interactions. Another barrier mentioned was the lack of time for adequate planning and involvement in extra activities other than teaching that also required their time and attention. All of the teachers interviewed expressed that much of what they do to enhance their own teaching takes place outside the classroom. These teachers shared their value for continued learning and envisioned for themselves and their students a state of the art classroom. Teachers took responsibility for finding outside resources to improve their own teaching.

Collegial teaching and learning was evident as an informal activity. As one teacher mentioned, "we like to steal great ideas and lesson plans from other teachers." Others teachers agreed with this notion and added that they also depend upon shared tips from workshops, conventions, and continuing education. The level of interaction among these teachers, however, was not as frequent as preferred by some. Casual observations during the school visit indicated that teachers felt free to walk into one another's classrooms during off-hours and freely share ideas with one another.

Profile: Teacher Self-Efficacy Beliefs at Pilot Junior High

Classroom management, communication/clarification, accommodating individual differences, and instilling higher order thinking skills were four ability areas in which teacher self-efficacy beliefs were to be explored. According to Bandura's theory of self-efficacy, personal belief systems are impacted by sources of information that are used to make personal judgements relative to one's own personal competency and persistence to overcome challenges.

In order to understand how teacher beliefs might be affected by the SPS and school labels, these teachers were asked to share their thoughts about how this affects classroom teaching practice. Teachers expressed general opposition to the use of labels because of the kinds of impact it tended to have on their instructional decision-making. Though they admitted to being advised by their school administration against succumbing to the pressures of school labeling, the teachers agreed that it "hovers" around them in the classroom creating doubts about their own judgments of what to teach. It was apparent from the discussion that teachers felt this approach undermined their beliefs in their own personal competency to decide what was important for their students to know and be able to do. The actual impact of this external pressure undermined teacher beliefs about their prior knowledge used as the foundation for their instruction. Additionally, the purpose of education was obscured by the focus to align teaching with the contents on standardized tests. This became evident in discussion about how to develop higher cognitive skills.

When asked whether they thought school labeling had any impact on the approach used to instilling higher order thinking skills, these teachers believed that

it did. Teachers not only felt that labeling schools affected their beliefs about what was important to teach, but also their feelings of how to adjust their teaching to accommodate a narrowed focus without losing opportunities for developing the cognitive connections necessary for higher levels of thinking. The professional trade off expressed by these teachers was in the selection of depth or breadth of the curriculum. This challenge served to violate their sense of moral commitment to deeply embedded beliefs of what constitutes best teaching practices and best knowledge.

In addition, unlike those who believe labels to be a motivating mechanism these teachers believed that labeling set a bad precedent for teaching and learning. Specifically, these teachers felt pressured to relinquish their own professional judgment about what their students should know and be able to do. The decision to change what and how to teach was made solely by the teacher while in the classroom. Of importance was that teacher deference to the externally imposed visions and leadership about what all students should know and be able to do reflects their self-efficacy beliefs about their inability to impact student achievement. Several teachers shared that they felt "guilty" for acquiescing to external pressure because they believed it "short-changed" the student. Teachers now concentrate first on assuring that students know aspects to be contained on upcoming standardized tests. Then, if time permits, and typically at the end of the school year, other information deemed important is shared.

Teachers were questioned about whether they thought their extra effort in finding activities to improve teaching and learning had any real impact on the school performance score. Somewhat timidly at first, teachers indicated that they

"hoped" this to be the case. As they began to discuss this issue further, however, teachers frequently referred to the SPS as an indicator of their effectiveness by pointing out that other schools did not perform as high which was inferred by them to mean that "we must be doing something right." This was an important indicator that the SPS was used as a source of information used by teachers. For example, these teachers agreed that neither student achievement, nor the school performance score is merely a result of the make up of the student population. Teachers felt that if this were the case, "then you could put anyone in the classroom and get the same results."

When teachers were asked about their abilities relative to learning equity and how they ensured all students were actively engaged in learning they indicated that they do "the usual." Teachers then delineated this as calling the student's name, standing/walking by their desk, placing a hand on the shoulder, having the principal come to the class, and if none of these strategies work the student is removed from the classroom.

Teachers were also asked to share how they accommodated individual learning differences. This discussion also indicated that "the usual" things were done. For example, extra tutoring, targeting student needs, and increased challenges for the gifted. Teachers then described how they set up conditions during tutoring sessions that allow students to experience success. In addition, allowing students to work ahead and be prepared for the next class boosted the students' self-esteem. These teachers indicated that when students feel successful, they are more inclined to strive toward greater challenges. When asked where they learned the techniques applied to accommodate individual learning differences, they all agreed that it was

"do or die" and learned through experience of "what works." They also indicated that new teachers were certain to have trouble in this area for this very reason.

At the heart of this line of inquiry about personal self-efficacy was concern about whether the dynamics surrounding the sources of self-efficacy (personal mastery experiences, verbal persuasion, modeling, physiological arousal) are supported by a robust professional culture on which teachers can depend. Such an environment can help teachers withstand external affronts that impact personal beliefs, motivation, and perseverance.

Profile: Teacher Decision-Making at Pilot Junior High

The dimensions of decision making of interest in this study include core technology (e.g., what and how to teach), operations and management (e.g., facilities planning), and work setting/context (e.g., where to teach and student assignments). The teachers at Pilot Junior High expressed that they were as involved in decision making as they care to be. Teachers expressed that they had "almost total" decision making authority about what to teach and how to teach in the classroom (i.e., Core Technology). However, as mentioned earlier, it was apparent that external pressure to improve student achievement scores diminished a degree of this teacher authority.

Teachers were then asked to share the level of their involvement in decision making at the school. These teachers indicated that they did not make many decisions at school. After some thought, however, teachers acknowledged that the decisions they typically made were related to the classroom and that these decisions were supported by the administration. This was seen as a definite and recent change in school administrative practice. Teachers indicated they are now asked for more

input than in the past, even if some suggestions were not put into practice these teachers appreciated being more involved. When asked whether they felt they were too involved in decision making or in decisions that they felt were irrelevant they indicated "No." Most teachers agreed with one respondent who felt that about 95% of their decisions were related to classroom content and maybe 5% were related to other areas.

Summary Profile: Pilot Junior High

The exploration of teachers' perceptions at Pilot Junior High represented contextually as a relatively higher performing school with just over one-third of the students from low-to-mid range poverty. The school was clean and informal interactions were pleasant and respectful. There was an obvious emphasis and pride for academic excellence as evidenced by the trophies on display and performance evaluations posted on bulletin boards. The atmosphere reflected was friendly, orderly, and safe.

School culture, measured by constructs identified as shared leadership, professional commitment, and collegial teaching and learning was explored using the focus group protocol that asked teacher to share their views accordingly. Teachers in Phase III of the pilot school perceived administrators as "facilitators" and "supportive of their professional decisions." In addition, they actively sought external resources to enhance teaching and learning at the school. In addition, it was evident that they served as a resource for other teachers (e.g., stealing ideas) and for student learning (e.g., after school tutoring). The views shared by these teachers reflected an embedded nature that reflected the school' professional culture.

Self-efficacy was explored in terms of the personal belief systems that were linked to teacher perceptions of their own teaching abilities. The beliefs expressed by these teachers relative to their teaching effectiveness (i.e., in classroom management, ability to communicate and clarify expectations in the classroom, to accommodate individual learning differences, and to instill higher order thinking skills) were relatively strong, but some challenges were evident. For example, teachers were not hesitant about sharing their opinions about the negative affects of labeling in general and the personal effort to resist the external pressure to change their teaching. Specifically, several teachers expressed how the narrowed vision for education (i.e., test performances & attendance) combined with pressure to show results undermined their own personal judgments of competency and moral commitment as educators. In addition, teachers disliked the stereotyping affects of labeling in general, but particularly of the SPS to portray teachers and students as good or bad, since there are always both in schools despite the label awarded. As a final note, teachers acknowledged that the use of labels tended to affect their expectations for students. One teacher shared that she had a sense of guilt knowing that the standard held and the approach to teaching for "gifted" students was much different that the standard and approach used to teach other students. Interestingly, teachers tended to inadvertently use labels (e.g., SPS of other schools, "gifted" students) as a source of information to make personal judgments about their own competency as well as about the approach to teaching needed for particular students.

Teacher beliefs about the ability to accommodate individual differences, was grounded in their conceptions of "do or die" past experiences with "what works." External pressure to produce higher student achievement caused these teachers to

doubt their ability to instill higher order thinking skills because the content knowledge on which they had been trained seemed of less value. Teachers discussed the challenges they faced when they were alone in the classroom with their students. Teachers struggled morally with the external pressure to focus on a narrowed curriculum and internal commitment to prior training to provide a "well-rounded" education. At this point, the teachers also expressed that were not convinced that the apparent direction taken for education in the United States has been intended or appropriate. However, in deference to national and state leadership teachers indicated hesitantly shared that "someone must know this is the right thing to do," so we "teach to the test" first, then as time permits present additional information believed to be important.

Three aspects were used to represent decision-making: core technology, work setting/context, and operations and management. Core technology involved decisions about what and how to teach and what materials to use. Teachers perceived that decisions affecting the classroom were largely their domain and felt supported by the administration to make any decisions involved. Other kinds of decisions explored involved the operations and management of the school and work setting. These decisions were of minor concern or interest to the teachers. In addition, teachers felt that they were neither overburdened by decisions, nor left out of making relevant decisions.

Lessons Learned: Pilot Study

The results from this preliminary interview proved useful for understanding teacher perceptions that were tied to the study dimensions. The focus group protocol and contextual observation checklist can be examined in Appendix E. Because of

the pilot school's not being in the original sampling pool, quantitative data cannot be compared with these responses. Results from this preliminary exploration however convey the powerful nature of accountability systems and high stakes testing to challenge the beliefs of the classroom teacher particularly about what is important for students to know and be able to do. Teachers at Pilot Junior High grapple with issues that define quality in terms of the breadth of knowledge verses quality as defined by the group performances on standardized tests, attendance and dropout rates. The following two case study reports provided a complete examination of both the quantitative and qualitative components of the RSCEQ-S, TEBS-S, and TDMS measures.

Individual Case Study Report (High Flyer Elementary)

The following section provides: 1) relevant quantitative data, 2) contextual overview, 3) profile of teacher perceptions of the school culture, self-efficacy, and decision making, 4) aspects of the school improvement plan, and 5) summary of the related findings for High Flyer Elementary a high performing (*School of Academic Achievement*, SPS=101.6) public school with a low percentage of poverty (19% of the total student population on free and reduced price lunches).

Relevant Quantitative Data

There were 537 students and 28 total faculty for grades 4 and 5 at High Flyer Elementary school. Of the total student population, 15.8% percent of the student population was minority and 10.6% in need of special education. Average daily attendance in October, 1999 was 515.

School performance scores are made up of indices that give weights for LEAP 21 performance, Iowa Test of Basic Skills (ITBS), attendance rate (with or

without dropout rate depending on grades 7 and 8 in schools), and the dropout rate. The school's performance score of 101.6 in 1998-99 rose 5.1 points to 106.7 in 1999-2000. High Flyer Elementary is currently labeled as a "School of Academic Achievement," the status for which the Louisiana Department of Education (LDE) hopes all schools will attain.

Changes in the School Performance Score (SPS) reflected several improvements to the indices. The index for Leap 21 criterion referenced test performance for example, ranged from 0 to 120, and rose from 56.2 to 58.1 from 1998-99 to 1999-2000. This particular index accounts for 60% of the total School Performance Score (SPS) awarded. The index for the ITBS ranged by grade level. The grade 5 index ranged from 0 to 109.4 and accounted for 30% of the SPS. High Flyer's Iowa index rose from 32.7 to 35.4. Average daily attendance in October, 1999 was 515 (537 enrolled). The attendance index ranged from 0 to 18.3 for elementary grades without grades 7 and 8. High Flyer's attendance index rose from 12.7 to 13.2.

Mean subscale scores for dimensions of school culture included: Shared Leadership (M =22.08, SD= 2.99) Professional Commitment (M =22.15, SD =1.46), and Collegial Teaching and Learning (M =15.62, SD =2.10). Mean subscale scores for dimensions of teacher self-efficacy were as follows: Classroom Management (M=21.46, SD =2.11), Communication/Clarification (M =21.54, SD =2.33), Accommodating Individual Differences (M =18.23, SD =3.54), and Instilling Higher Order Thinking Skills (M =13.08, SD =2.02). Means subscale scores for perceptions of actual decision-making were as follows: Core Technology (M

=23.20, SD =4.71), Operations/Management (M =6.08, SD =. 95) and Work Setting/Context (M =7.38, SD =1.94).

The teachers' sense of decision-making deprivation was also examined. A deprivation index was derived and reflects the difference between the teachers preferred level of involvement and actual level of involvement in a series of decision-making activities. Mean deprivation scores calculated for decisions defined as the Core Technology ranged from a low of 2 to high of 8. The mean deprivation score for Core Technology at High Flyer (M = 4.89) was in mid-to-high range. Mean deprivation scores for Operations/Management ranged from a low of 3.07 to a high of 7.28. The mean deprivation score for Operations/Management decisions at High Flyer elementary (M= 4.46), was also on the mid-to-high end. Finally, the mean deprivation score for Work Setting/Context (where and who to teach) decisions ranged from a low of .32 to a high of 1.22. The sense of deprivation teachers expressed for Work Setting/Context at High Flyer elementary (M =. 38) was near the low end.

Contextual Overview of High Flyer Elementary

Teachers were asked to volunteer to participate and were chosen by a stratified random sampling technique in grades 4 and 5. Six teachers that represented Language Arts, Math/Science, and Computer Literacy agreed to volunteer. A one-hour focus group session was conducted using the protocol instrument that guided the discussion on topics such as the teachers' perceptions of the school's professional culture, sources of teachers' self-efficacy, and sense of decision-making deprivation (see Appendix E).

High Flier Elementary School is a red brick building located in a mid-sized city erected in 1959 in the northern region of the state. The school is situated on the outskirts of the city along a major U.S. Highway. A banner in front invites community support, giving a website address to visit the school online. Just behind the school is a large field with a paved track that winds around the back of the school. A large old tree stands nearby the track with a wooden bench under its shade. The playground equipment is in good shape. Two tires hang from a fence obviously used for target practice. A new tetherball pole, swings, and baseball field are directly behind the school building. Older playground equipment in front of the building was no longer used. A male coach was observed directing a group of eager boys out onto the field.

Once inside, the red brick building was transformed by a sense of home communicated by the country welcome theme displayed on numerous ornamental wall hangings in the foyer. A large picture frames the school's vision statement: "Our greatest contribution is to be sure there is a classroom teacher in every classroom who cares that every student, everyday, learns and grows, and feels like a real human being."

Hallways were wide, clean, and free from lockers. One hallway, near the office, was lined with framed pictures of the U.S. Constitution, Preamble, Bill of Rights, and other historically notable documents. Strong community support was evident. Plaques document strong involvement by the Parent Teacher Association and other local community organizations. A newspaper article proudly displayed community involvement by a famous actor. Other bulletin boards reflected pupil involvement in the community. For instance, one impressive activity concerned

how pupils helped raise money for abused kids. Trophy display cases bulged with evident academic and athletic successes.

The cafeteria was decorated with kitchen curtains giving it a clean, home-like atmosphere. Teachers sat with students at lunch.

Janitors were continuously busy cleaning hallways and unused rooms, while students were in class. It was later learned that janitors clean after the children three times a day. In fact, the janitors were perceived as "great with the kids" as a source of encouragement. Some classrooms had tennis balls placed on the legs of chairs to reduce scuffing the floors and noise. The gym was clean and the walls were painted in bright colors. The restrooms were clean and well supplied. The building was in good shape with no visible need of repair.

The library represented a state of the art design with the morning welcome and announcements provided via classroom television and performed by students at High Flyer. The librarian expressed a vision to expand and improve the existing supply of library materials. The computer lab provided current equipment (i.e., less than five years old) and was utilized daily.

The atmosphere conveyed a sense of care for every aspect of the school. The extra touches to the appearance (e.g., curtains in the cafeteria, brightly colored gym, and country welcome theme at entry) around the school make transition from home to school an easy one. The multiple, positive, "visions" for the school were reflected in state of the art equipment in the library, computer lab, and new playground equipment, suggesting aspirations for even greater success.

Profile: School Culture at High Flyer Elementary

Elements of the school's professional culture were explored in terms of shared leadership, teacher's professional commitment, and degree of collegial teaching and learning. Evidence of culturally embedded aspects that reflect a supportive learning organization was sought.

In order to determine how teachers perceived the quality of shared leadership and vision they were asked whether they were aware of the school performance score (focus of improvement) and about any noticeable changes in the school administration (supportive structures). Teachers at High Flyer Elementary school viewed school administration as helpful, involved, and supportive. However, they were unaware of their school performance score and that it had risen. They felt that the affects of accountability and high stakes testing had more of an effect at the district level than at the classroom level. Specifically, teachers perceived supervisors as being more available to them than in the past. In addition, they believed school gains were unfair, and attributed them to the focus on objectives that correlate to the tests.

The professional commitment of a teacher to serve as a resource and seek resources for their own improvement as well as for their students was determined by inquiring about the barriers faced. A major barrier to serving as a professional resource for one another at High Flyer was the lack of days during the school year set aside for collaboration.

Professional interactions provide a sense of collegiality among teachers. While opportunities for professional development were offered regularly at High Flyer, teachers expressed that the quality could be improved if they could get

together by grade level, as opposed to school level. This would allow them to discuss ideas and strategies that work and focus on how to improve student learning. Instead, teachers mentioned that they typically get together informally "in the lunch room" where time was spent focusing on how to improve teaching and learning.

Profile: Teacher Self-Efficacy Beliefs at High Flyer Elementary

Classroom management, communication/clarification, accommodating individual differences, and instilling higher order thinking skills were four ability areas in which teacher self-efficacy beliefs were explored. In order to understand conditions that might affect their beliefs, teachers were asked to discuss the affects of labeling the school on classroom teaching practices. Teachers indicated that nothing had changed substantially for them as a result of the LDE school label or SPS. That is, they believed they knew what they were doing in the classroom before pressures were made by the accountability and high stakes testing movements in Louisiana and continue to feel that they know how to best address the needs of their students. Having expressed that, and of interest, a number of changes were then discussed.

Changes that teachers described and that served to boost their beliefs about the effectiveness of their own teaching included increased documentation of the classroom activities and interventions strategies used to improve student learning. Teachers indicated that seeing their work product on paper served as a source of information to verify the quality and quantity of their work. Additionally, these teachers shared that the increase in documentation had not resulted in less teaching, but had definitely slowed down learning progress in the classroom. Teachers

however did not view the slowing down affects of documentation as evidence of poor teaching ability.

Another change noticed by the teachers was the reduction and/or elimination of some activities previously used to expand learning, such as music and art. Teachers handled the situation by informing students that focus on the daily skills being taught were a necessity because they will be tested on them. One teacher stated, "I don't teach anymore." Another teacher felt discouraged because the activities being left out "would be of benefit later on." While the teachers did not perceive any internal changes to their belief systems, their behaviors reflected the accommodations needed as the result of the external pressures placed upon the schools. The affects of external pressure to change teaching practices were mediated by these teachers' self-efficacy beliefs. This was evidenced by the clear conception expressed by teachers about the difference in the straightforward approaches used to improve student achievement and by the lack of obscurity about appropriate content. This explains the original perception expressed by teachers that nothing for them had really changed.

Another source of information used by teachers that could explain the self-assured attitude expressed by these teachers was the level of parental support experienced. "People die to get their children into this school" one teacher stated. Many of the teachers were "amazed and grateful" because they had always received more help than expected from the parents. Both parents and students were very involved in reaching out to the community. Teachers expressed that they were given professional respect from the majority of parents for what happens in the classroom. This dynamic process reflects authentic evidence of personal success

(Bandura, 1997). That is while the teacher may have strong beliefs in the effectiveness of their teaching, the quality of parent involvement acts as a source of social validation. As a result of this validation given by parents, teacher's self-efficacy beliefs are raised. Bandura (1997) explains that success alone does not necessarily raise or lower self-efficacy beliefs. Rather it is a combination of interactions within a particular context that are most influential.

A mechanism used by teachers at High Flyer they attribute to keeping students on task and the level of learning in the classroom high is the implementation of behavior management plans. These plans include posting the rules of behavior and documentation of student misbehaviors and are used to communicate with parents how their child is doing. Teachers indicated strong parental support for this plan. Parents of students at High Flyer were described by teachers as having "busy" lifestyles and are often unable to offer help with homework. However, they do take responsibility for raising their children and are very responsive to correcting misbehavior in the classroom.

Teachers stated that the major reason students do so well at High Flyer is that teachers are given the authority to "express" themselves in ways they know will build up needed skills in children. Teachers mentioned that a neighboring school district was considering the use of lessons taught from a script. These teachers strongly believed this approach would be problematic for them. As one teacher surmised, "there is more than one way to skin a cat" and scripted lessons take away the flexibility and level of teacher involvement in the child's learning processes. This observation by the teachers gets at the heart of self-efficacy beliefs that are influenced by impediments to successful teaching. These teachers were cognitively

processing information in ways that were preparing them to deal with a potential and externally imposed idea about how to teach.

The teachers interviewed at this school believed that there are some children that "no matter what you do, they are just not going to get it. Not everybody needs to fit in a round hole." A major problem perceived by these teachers was that "parents don't want to hear that their child is inadequate." Fortunately, the majority of children are adequate at High Flyer elementary. However, the teacher expressed concerns about the children that did have difficulty in school were typically from an unstable home life where the "parents have trouble with alcohol, drugs, or the kids are at school worrying about whether fighting parents will be at home when they get there." These are the children that "we devote a little extra time to and work more with mom and dad." The strength in the teacher's personal beliefs to raise student achievement at High Flyer had limits in this area.

Profile: Decision-Making at High Flyer Elementary

The dimensions of decision making of interest in this study include core technology (e.g., what and how to teach), operations and management (e.g., facilities planning), and work setting/context (e.g., where to teach and student assignments). Teachers indicated that they were frequently asked to join in district discussions about the curriculum and strategies to raise student achievement. Though accountability had heightened the importance of raising student achievement, these teachers expressed that the quality of teaching and learning should not be jeopardized for the numbers. Finally, teachers indicated that they did not feel overburdened by their level of decision making.

Relevant Aspects of the High Flyer Elementary School Improvement Plan

The High Flyer School Improvement Plan states one simple goal: to improve the academic achievement for all students. Objectives are to concentrate on fourth grade math and language arts performances and on attendance. New state standards and benchmarks as well as letters to parents on attendance were strategies to fulfill the objectives.

Summary Profile: High Flyer Elementary

Teacher perceptions at High Flyer elementary represent those from a high performing school at which a low percentage of students living in poverty attend. The school culture reflected an image of leadership that was strong and supportive. It is evident that the school receives much attention from the community. For example, the school proudly displays its ongoing successes (i.e., awards, trophies) and evidence of community support (e.g., newspaper clippings). The teachers professional commitment to improve the quality of teaching and learning was reflected in statements about when (during off-hours) and where ideas were shared (e.g., in the cafeteria).

High Flyer elementary was surrounded by sources of information that conveyed mutual respect among those at the school. Examples include attention to and care for the school building and grounds, parental support for the child's behavior in class, community support and involvement, and administrative support for helping improve student test scores. In addition, janitors were seen as part of the instructional team and "great with the kids." Teachers used the requirement to document classroom activities as a source of evidence of what they were currently doing for children and reminded them of previously undocumented professional

involvement and expertise. Teachers also believed that a majority of the students were prone to perform well easing the classroom challenges. Other children, no matter how much is done for them, "aren't going to get it." These conditions served to mediate teacher self-efficacy beliefs by helping minimize the barriers to successful teaching and learning.

Active support from the community and parental support for what happens in the classroom helped teachers believe that "we get whatever we ask for." These latent messages convey a sense of importance and respect for teachers and support their personal belief systems in the ability to carry out the tasks of teaching.

Teachers attributed the high performance of students at the school, as reflected by the school performance score, to the degree of flexibility they had to express themselves in ways that build skills. Teachers were unconcerned by labels awarded to their school indicating that they knew what they were doing prior to accountability and will continue to provide quality teaching that cannot be reflected by a number.

Core technology, operations and management, and work setting and context were dimensions used to categorize typical decision making activities in the current study. In sum, core technology involved decisions of what and how to teach and assess student learning. Teachers viewed their involvement in decision making as adequate and regular. Finally, the professional development opportunities and workshops were considered critical by these teachers; however they believed that the quality of these activities could be improved if more time were set aside during the school year to discuss what actually works by grade level.

Lesson Learned: High Flyer Elementary

In sum, the quantitative findings when coupled with qualitative explanations elucidate the contextual clues that are theoretically linked to student achievement. All mean subscale scores for High Flyer elementary were higher than most scores in the total sample. Qualitative explanation of the subscales translated into teacher perceptions of the *school's professional culture* as providing quality professional learning opportunities. However, teachers felt that these opportunities could be somewhat more focused on improving student learning. In addition, teachers accepted the goal to improve student achievement using state standards and benchmarks that are correlated to standardized tests indicating high administrative support to accomplish this goal. Teachers also viewed parental support and commitment to their child's education as high, despite the lack of support in helping with homework. This condition was justified as the result of 'busy lifestyles.' Teachers viewed the level of parental support for the child's classroom behavior as a major benefit, offsetting the homework deficiency.

Teacher self-efficacy mean scores for High Flyer elementary was higher than the sample average across all dimensions examined with one exception (TEBS-S: Accommodating Individual Learning Difference). Qualitatively, teacher self-efficacy beliefs were manifested by their self-assured expressions about the effectiveness of their own teaching abilities. In addition, teacher's interviews demonstrated how multiple sources of influential information were integrated into existing belief systems as reflected in perceived teaching strengths (raising achievement) and weaknesses (raising achievement of disadvantaged children). Teachers expressed confidence in their existing knowledge base and in their ability

to teach. Recent changes due to accountability and goals for school improvement had generated the need to document classroom activities. Teachers were aware that this activity had slowed the progress of classroom learning. However, this effort to document teaching activities served to verify for teachers the amount of effort expended, and thus helped to generate a sense of personal accomplishment.

Administrative guidance in helping teachers understand the alignment of standards and benchmarks to testing components served to model for teachers a plan for success. Teachers filled in gaps of professional development by meeting informally to discuss specific needs for improving student achievement. Finally, the challenges presented by the quality of parental involvement in homework were minimized by the appreciation for the quality of their classroom behavioral support.

Decision making by teachers at High Flyer seemed almost institutionalized as evidenced by the comments teachers made about "getting whatever we ask for" at this school. School administrators informed teachers of the strategies they would use to bring about school improvements and this proved to be effective. Teachers felt their most important decisions were how and what to teach and that this authority was threatened by pressure to focus on student achievement.

In order to describe the context in which teacher perceptions occurred, the Contextual Observation Checklist that was a part of the School Analysis Model (SAM) developed for the Louisiana Department of Education (LDE) was utilized. The information collected using the observational checklist ensured that numerous relevant contextual area were included: behavior of the faculty, campus behavior, hallways and playground conditions, custodial services, cafeteria, library and computer labs.

As a result of the site visit and use of the checklist, numerous symbolic expressions of care and academic focus were evident. While observing the school campus, particular attention was given to aspects that might reflect dimensions of the school's professional culture and sources that influence teacher self-efficacy beliefs.

Individual Case Study Report (Goodwill Elementary)

The following section provides: 1) relevant quantitative data, 2) contextual overview, 3) profile of teacher perceptions of the school culture, self-efficacy, and decision making, 4) aspects of the school improvement plan, and 5) summary of the related findings for Goodwill Elementary a low performing (*Academically Below Average*, SPS=32.2) public school with a high percentage of poverty (94.3% of the total student population on free and reduced price lunches).

Relevant Quantitative Data

There were approximately 421 students and 25 total faculty at Goodwill in1998-99. 99.5% percent of the total student population are minority and 6.9% of the student population are in need of special education. Average daily attendance in October, 1999 was 393.

School performance scores are made up of indices that give weights for LEAP 21 performance, Iowa Test of Basic Skills (ITBS), attendance rate (with or without dropout rate depending on grades 7 and 8 in schools), and the dropout rate. The school's performance score of 32.2 in 1998-99 dropped 8.1 points to 24.1 in 1999-2000. Goodwill Elementary is currently labeled as an *Academically Below Average* school.

Changes in the School Performance Score (SPS) reflect several changes to the indices. The index for Leap 21 criterion-referenced test performance for example, ranged from 0 to 120, and fell from 19.1 to 12.7 in 1999-2000. This index counts for 60% of the total School Performance Score (SPS) awarded. The ITBS index ranges according to grade level. For grade 5 scores ranged from 0 to 109.4 and counts for 30% of the SPS. Goodwill's ITBS index also fell from 5.3 to 3.6. Average daily attendance in October, 1999 was 515 (537 enrolled). The attendance index ranged from 0 to 18.3 for elementary grades without grades 7 and 8. Goodwill's attendance index remained constant at 7.8.

Mean subscale scores for Goodwill elementary on the dimensions of the school's professional culture include Shared Leadership (M=20.26, SD=3.81) Professional Commitment (M=19.83, SD =3.81) and Collegial Teaching and Learning (M=14.94, SD=3.40). Mean subscale scores for dimensions of teacher self-efficacy for Classroom Management (M=20.76, SD =2.59), Communication/Clarification (M=20.71, SD =2.39), Accommodating Individual Differences (M=19.48, SD =2.83), and Instilling Higher Order Thinking Skills (M=12.88, SD =2.42). Means subscale scores for perceptions of actual decision-making involving Core Technology (M=19.54, SD =7.53), Operations/Management (M=7.00, SD=2.29) and Work Setting/Context (M=7.34, SD =2.91). All mean subscale scores for Goodwill elementary were lower than mean scores of the total sample.

The teachers' decision-making deprivation was measured using an index of the difference between opportunities they have and should have in making decisions. The deprivation index for decisions defined as the Core Technology

ranged from a low mean = 2 to a high mean = 8. The deprivation index for Core Technology at Goodwill (M = 7.62) was on the high end. Operations/Management index of deprivation ranged from a low mean = 3.07 to a high mean = 7.28. The sense of deprivation for Operations/Management at Goodwill elementary (M=6.51), was also on the high end. Finally, the deprivation index for decisions involving the Work Setting/Context for teaching ranged from a low mean = .32 to a high mean =1.22. The sense of deprivation teachers expressed for Work Setting/Context at Goodwill elementary (M=. 92) was also on the high end of the scale.

Contextual Overview of Goodwill Elementary

Teachers were chosen, using a stratified randomly sampling technique, from grades Pre-K to 6. Six teachers agreed to share their thoughts and opinions and represented grades 1 through 6. A one-hour focus group session was conducted and protocol instrument used to guide the discussion. Topics for discussion were designed to reflect the teachers' perceptions about the school's professional culture, sources of self-efficacy, and sense of decision-making deprivation.

Goodwill Elementary School was erected in 1958 and is located in a small town in the southern region of the state. A cemetery sits across the street from the school. Small homes, many of which were in need of repair, surround the school. One nearby home/business sold tombstones that were on display in the front yard. A chain-linked fence surrounded the school. Side gates remained padlocked all day. The front gate was left open, however parking was available only on the sides of the building. The side parking lot had large, loose gravel making it difficult to walk. Broken bottles lay nearby. A separately operated preschool program was adjacent to the school. Behind the school, playground equipment was in disrepair though no

longer in use. In front of the school, swings and an above ground deck were available for recreation.

If not for the two men that were observed on the roof inspecting obvious problematic conditions, the observer's first impression was whether the school was actually occupied. These outside conditions of the school seemed an almost ominous foreshadowing of conditions within.

The schools' ambitious vision statement for students was posted on a small bulletin board located in the school office. The 8 ½ by 11 sheet of typing paper, stated the vision, "That all students will perform to their maximum level of performance." Just outside in the hallway trophy display cases were filled with dusty reminders of past successes and achievements. Most predominant were athletic achievements (i.e., basketball, track, and football) from years ago (1977 to 1994). Portable bulletin boards in classroom hallways contained samples of student writing and posted those with passing grades. It seemed ironic, but noteworthy given the conditions at the school, that the stories written by pupils were about children in worse conditions.

The teacher's lounge, located across from the office, was a spacious area used for meetings, copying, television, and eating, but was relatively inactive the day of the visit. On one wall a large bulletin board displays letters of opportunity to participate in the Presidents Award for Excellence in Science and Math and an LSU writing project. These were however overshadowed by numerous required letters and photos from convicted sex offenders living in the area. Also posted in the teachers' lounge was the schools policy against sexual harassment.

Cafeteria workers not only prepared the lunch, but cleaned the cafeteria afterward as well. Teachers sat with the students at lunch.

Next to the cafeteria was the gym that had definitely been neglected for some time. A disposable diaper, for example, had been in one locker room sink for some time and toilets had not been flushed. The gym floors were in desperate need of mopping. One teacher brought several boys into the gym for free play. A caseworker dropped by to visit this particular teacher, and in front of the observer and the students reprimanded her for failing to fill out paperwork that had been submitted. The lack of reaction by the teacher was almost as if complaint were a routine.

Janitors were present on campus, but were not observed cleaning inside the school building. After lunch however, one janitor had several older boys from an in-school suspension class attempt to clean the playground. Both the janitor and the students approached the task somewhat half-heartedly, though the relations between them were friendly. On the day of this visit, none of the bathrooms had toilet paper, towels for hand washing, or trash receptacles. Many profane statements were carved into the stall doors and on the walls. It was later found out that supplies were on order.

Hallways needed to be swept and mopped. Most students seen walking in the halls, after classes had started, seemed to be avoiding or prolonging arrival to their destination. Teacher to student interaction was authoritarian. Most students dutifully obeyed teachers, with only a few unable to contain their jovial feelings. Despite the rigid disciplinary approach, teachers and students appeared to care for one another. Some teachers walking students from class to class were insistent that

this be done single file. As one group of children came around a corner one teacher exasperatedly shouted, "Walk in a straight line and no talking damn it." Despite another teacher's burdensome efforts to keep a group of younger children single file, they continued to fail to do so. By the end of the day, it was apparent that this activity alone had taken a toll the teachers. Still another teacher was overheard from the hallway raising her voice at students due to an incident worthy of punishment. The teacher warned, "Are you all stupid? Go ahead, all of you laugh and see where it gets you." The class then quieted down.

Unexpectedly, during lunch the fire alarm sounded. Students from classrooms were then marshaled out to the back of the school. At first, one might have thought it to be a successful drill. However, the distance from the building at which teachers and children were standing, had there been an explosion, would have been insufficient for safety (i.e., 300 feet). Several minutes later it was discovered that there were still staff and children in the cafeteria ignoring the alarm. When lead staff directed those still inside the cafeteria to evacuate some of the adults seemed confused, while others seemed very upset that anyone would have scheduled a drill while trying to "feed the babies." It was later learned that a student had pulled the alarm.

All day the library had been in use by the principal and regional service coordinator who were providing teacher training on a rotational basis. While the room was small, it was well stocked with materials. The computer lab was busy and children remained actively engaged completing assigned tasks.

The atmosphere conveyed a sense of neglect and hopelessness as evidenced by the lack of attention and concern for the appearance of the school surroundings.

In addition, a sense of weariness was reflected in ongoing attention to student misbehavior and in half-hearted efforts taking place the day of the visit (e.g., to clean the playground, to evacuate the cafeteria, to respond to rebukes from outside contacts).

Profile: School Culture at Goodwill Elementary

Elements of the school's professional culture were explored in terms of shared leadership, teacher's professional commitment, and degree of collegial teaching and learning. Evidence of culturally embedded aspects that reflect a supportive learning organization was sought.

In order to determine how teachers perceived the quality of shared leadership and vision at Goodwill Elementary they were asked whether they were aware of the school performance score (focus of improvement) and about any noticeable changes in the school's administration (supportive structures). These teachers were unaware of the school performance score, but knew that it had declined. The vision to raise student test scores however was very clear. As one teacher stated, "we have to show results, ...but it takes time to talk about this stuff." When asked about changes in the school's administration many indicated that they believed administrators were "trying very hard" to help them through the adoption of various educational programs. In addition, administrators now "required" that Pre-K-6 teachers meet on a regular basis. The focus of these meetings concentrated on sharing strengths and weaknesses and developing teaching strategies that work. Teacher opinion of upper level administration (i.e., local school board) however, was much less favorable. For example, teachers strongly believed that little to no support comes from the local school board and they had strong beliefs that this lack

of involvement played a large part in the ineffectiveness of their school. Of interest, these teachers did not attribute school conditions to poor school administration.

The professional commitment of teachers to serve as a resource for others and seek resources for self-improvement was determined by inquiring about the barriers and or challenges faced. A major concern for all the teachers in the focus group was the strategy used to "copy" what is working in other states and districts. Teachers were passionate in their views of this as problematic and useless. This was explained as being due to the differences in terms of funding and resources needed to bring about the kind of success to be replicated. In addition, teachers perceived the level of parental involvement as problematic in that many "cannot help" children with homework. Teachers believed many parents "had to be shown how to help their kids first." One teacher stated that she invited one concerned parent to visit her class and learn the math skills to be mastered by the child, but the parent had not taken up the offer. The teachers interviewed expressed that they were overwhelmed by the challenge of what, "exactly," to do for their students. One teacher captured the essence of this barrier stating that what was desperately needed was not what others were doing successfully, but how to "lift up a low performing school." Teachers were looking for external sources of support and seemed unable to deal with task of finding appropriate resources for addressing challenges in the classroom.

Collegial teaching and learning reflects the degree of professional interactions among the total learning community. These teachers felt that at the beginning of the year they did not have a good network of communication, though later in the year and as part of administrative requirements, this aspect was seen as

improving. In addition, these teachers believed that before they could be effective teachers their first step involved "giving the parents a reason to be involved." One veteran teacher viewed parental involvement in education as a family value. The children that presented the most difficulty for these teachers were those from families without value for education. While they were often inspired at workshops and excited about the use of new materials and programs, current plans had been placed on delay due to delays in the release of funding. Teachers seemed somewhat consoled however, knowing that they would be getting "a lot of money later in the year to work with."

Examination of the RSCEQ-S dimensions using the focus group protocol provided an opportunity to ask teachers about their perceptions of shared leadership, professional commitment, and collegial teaching and learning environment. The perceptions of teacher interviewed at Goodwill Elementary indicated their tendency to deflect local responsibility onto a host of other factors (e.g., uncaring local school board, uninvolved and uneducated parents and lack of appropriate teaching strategies) believed to be responsible for the school's poor performance. It was apparent that norms, beliefs, and assumptions of the teachers interviewed at this school represented deeply embedded perceptions of the school environment. It was of interest that the local school administration was not perceived as problematic though teachers expressed that the physical conditions at the school were deplorable, funding decisions were inadequate, and staff management was not evident (i.e., janitorial services).

Profile: Teacher Self-Efficacy Beliefs at Goodwill Elementary

Classroom management, communication/clarification, accommodating individual differences, and instilling higher order thinking skills were four ability areas in which teacher self-efficacy beliefs were explored. In order to understand conditions that might affect their beliefs, teachers were asked to discuss the affects of school labeling on classroom teaching practices. One teacher stated that she tried to put it [pressure to perform] out of her mind and just give the best that she could to students each day. Another said he wears the "label like a necktie and wants to do all he can to clean it." Still another teacher stated that he felt like a carpenter that had been told to go a build house without using tools and provided with no foundation upon which to build the house. The mood of teachers became apparent as numerous conditions were shared that generated a sense of despondency that decreased their motivation to a point where it seemed that teacher were waiting for solutions to be brought to them.

These teachers were very concerned that the amount of time needed to discipline their students. Teachers were very cognizant that the amount of time spent in the classroom on student discipline shortened the amount for teaching and learning. Teachers expressed their exasperation with the fact that a large number of their students needed specialized attention and instruction. This condition made it difficult to move forward with daily lessons. Teachers also believed that without the ongoing support from home, these students would not be able to retain skills upon which to build in the following year. One teacher stated that every day she says, "...we're going to be better...in my heart I say it, but I don't feel it...because I know it's the same kids every year... and it gets very discouraging." Teachers

resented being asked to make a "mole hill out of a mountain." It was evident in this discussion that the challenges in the classroom overwhelmed the teacher beliefs about the effectiveness of their teaching abilities. Two formerly retired teachers internalized these challenges to mean that they should not be at the school. Instead, 'younger' teachers are needed to handle today's kids. In addition, two other teachers interviewed were temporarily certified and shared that while they wanted to make a difference they knew they did not possess the necessary skills to handle problems of this magnitude.

The issue of labeling also brought out discussions of teacher beliefs in the uselessness of being asked to emulate successful program strategies that reflected the actions of "perfect kids" and "perfect teachers in school districts with money." These teachers wanted an explanation for how to succeed within their own current system and "how a low performing school/student is lifted...."

Finally, teachers stated that while the lack of money to carry out many desired activities was prevalent, "there are so many programs going on simultaneously that it is sometimes too much to handle."

By using the focus group protocol the sources of information that were used by teachers to make judgments about their personal capabilities were illuminated. Cognitive processes were reflected, for example, in teacher beliefs that they lacked the level of support needed from higher administration, parents, and from students in the classroom. Affective processes of self-efficacy regulate emotional states by supporting human agency to transform the environment. The fact that Goodwill Elementary represented one of the lowest performing schools statewide, and that the

score had dropped served to exacerbate the need for teachers to create biases to explain emotionally perturbing events.

Profile: Teacher Decision-Making at Goodwill Elementary

The dimensions of decision making of interest in this study included core technology (e.g., what and how to teach), operations and management (e.g., facilities planning), and work setting/context (e.g., where to teach and student assignments). Teachers indicated that school administrators did ask for their input on curriculum issues. One teacher believed that by asking parents (and thus students) to join in this particular activity conditions might be improved. The rationale to involve parents and students in the development of curriculum was based on national inspirations to involve the "whole village" in raising a child. However, according to the literature and research effective decisions must be personally salient, efficacious, and efficient.

Teachers expressed confusion and lack of confidence in what and how, exactly, to teach the students at this school. One teacher stated that he "was not as involved as he felt he needed to be in order for the school to be successful." This in part was because of the distance he lived from the school. Where to teach has proven to be problematic for this school based on teachers participating in the focus group. Two teachers had returned from retirement status almost as a gesture of charity. These teachers expressed a degree of sadness that they were there as a last resort and made it clear that they did not believe this represented what was 'best' for students. One teacher indicated that they were tired and felt bad about being there because the pupils need someone with more energy. Two others were teaching at the school on an emergency basis with temporary teaching certificates. These

teachers were eager for resources, but were disappointed in the level of support the school received.

Relevant Aspects of the Goodwill Elementary School Improvement Plan

Priorities identified in the 1999-2000 School Improvement Plan include attention to the improvement of test scores, a reduction in student discipline problems, an increase in parental involvement, and improvement to the motivation and self-esteem of Goodwill elementary students.

The principal views the quality of classroom instruction as low. In addition, due to the high-risk background from which most students come academic expectations were only average.

Teachers agreed that school leadership was good, but rated their professional lives at the school as only average. In addition, teachers believed that the community has a low opinion of the school that has been unfairly influenced.

Parents and students surveyed at the school district level expressed high opinions of leadership and instructional quality at the school. Students viewed teachers as caring, though statements acknowledged that this condition may not be apparent to an outside appraiser. Parents responded to the survey that they were generally satisfied with the school and indicated beliefs that children were receiving an above average education.

Classroom observations were conducted as a part of the district-wide school improvement plan. Observers noted that teachers needed help in the delivery of instruction. The observers found particular problems with the teacher's ability to accommodate individual differences and develop higher order thinking skills. As a final note, the majority of teachers observed utilized a teacher-centered approach

(i.e., dissemination of facts, rules, procedures) which was felt to explain student restlessness in the classroom and feeling expressed that the lessons were long and boring.

Summary Profile: Goodwill Elementary

Teacher perceptions at Goodwill elementary represented those from a low performing school at which a high percentage of students living in poverty attended. Overall the school reflected conditions of neglect. Ironically, both teacher and parental opinion support an image of school leadership that is strong and supportive. Leadership from the local school board office however was viewed to be very problematic. In addition, teacher desire for collaboration and more information about effective teaching strategies was evident. The desire to improve the quality of teaching and learning at Goodwill Elementary reflected a sense of professional commitment, however a robust foundation of support has yet to be established.

The school environment at Goodwill elementary appeared to be neglected. Examples include inattention to and care for the school building and grounds, lack of parental academic and behavioral support for the child in class, lack of community support and involvement, and lack of leadership from the school board. Teachers felt overwhelmed by the volume of high-risk students in the classroom and by the teacher's lack of educational preparation for such conditions. The reaction to these conditions was evidenced by an 18% annual teacher turnover rate reported in the school improvement plan. Teachers were desperate for ideas to regain parental involvement.

The lack of support from the local school board was viewed as very problematic to teachers who believed that board members should be only those with

some familiarity and concern for educational issues. Adding fuel to the fire was the fact that board members are paid the maximum allowed, but do nothing for the public schools. Teachers believed members of the local school board, "do not care about the kids at Goodwill...their kids go to private schools."

Teachers attributed the low performance of students at the school, as reflected by the school performance score, to the lack of family values for education. In addition, materials and resources were only partially available to them. Teachers were concerned about the school label, but felt that until these fundamental issues (parental involvement and lack of classroom resources) are resolved they cannot teach well.

Core technology, operations and management, and work setting and context were used to categorize typical decision making activities in the current study. In sum, core technology involved decisions of what and how to teach and assess student learning. Teachers viewed their involvement in decision making as somewhat lacking, but improving. Teachers also indicated their need for professional development opportunities that provided specific information about how to work with high-risk populations. Workshops that present best case scenarios were deemed useless.

Lessons Learned: Goodwill Elementary

In sum, the quantitative results from Phase II were enhanced by the qualitative observations provided in Phase III. Mean scores on the RSCEQ-S, TEBS-S, and TDMS measures were lower for Goodwill elementary than scores for most other schools in the total sample. Case study explorations were helpful for illuminating details tied to the quantitative findings. Teacher perceptions of

dimensions that make up the *school's professional culture* for example were explained in terms of the limitations on administrative effectiveness imposed by an uncaring community. In addition, while administrators provided multiple programs and opportunities for observing effective teaching, these were too voluminous and failed to meet the particular needs of the student population. While teachers were now required to meet regularly with one another, they were uncertain about the amount of help they were providing one due to their lack of preparedness for dealing with whole classrooms at-risk. Finally, the shared vision to improve student achievement was viewed by the teachers interviewed as impossible given the lack of parental support, low education level of the parent, and general lack of "family value" for education.

Teacher self-efficacy scores for Goodwill elementary was also lower than the average across all dimensions with one exception (TEBS-S: Accommodating Individual Learning Difference). Teacher efficacy scores on dimensions of effective teaching as measured by classroom management, abilities to communicate and clarify learning for students, and develop higher order thinking skills were manifested by teacher apprehensions. The processes that teachers used to deal with challenges to these beliefs included the use of multiple sources of evidence. Teachers believed that they possessed the abilities, but qualified them as less effective at this particular school. In addition, the goals of accountability and high stakes testing served to demotivate teachers according to feelings that the state would likely give up on schools like Goodwill Elementary and the ineffectiveness of showing models of ideal teaching environments. Teachers at Goodwill had indicated relatively strong beliefs in their ability to accommodate individual

learning differences, yet when this issue was discussed with teachers they shared their frustration with the overwhelming number of programs being implemented and uncertainty of the effectiveness of any of them with their particular classrooms. This challenge to their effectiveness was also noticed as having an affect on their beliefs in *ever* raising the school performance score or the scores of individual students.

Decision-making was explored at Goodwill Elementary and scores reflected lower involvement in decisions about what and how to teach than most other schools in the total sample. Teachers seemed to be passive recipients of what to teach and were unsure about how to implement multiple programs at the school, though they realized school funding was tied to program implementation. In response to this overwhelmed feeling, teachers indicated that they just teach the best that they can each day. Teachers at Goodwill were also shown how to teach as well. Teachers expressed their frustration with the examples of effective teaching brought in for them to model. These teachers were very cognizant of the fact that the kinds of information and professional development provided were not currently meeting their needs, but were doubtful that these needs would ever be addressed. Teachers were not involved in operation and maintenance decisions. One example of this was when the teachers that were interviewed, mid-school year, indicated that they were still waiting on funding to purchase classroom materials. Work Setting/Context decisions that would involve teachers in making decisions about the best match between teacher and students were not evident. Two teachers that were interviewed indicated they were not the best for their students. Other teachers expressed their

frustration with having been assigned a classroom predominantly of students with learning difficulties.

In order to describe the context in which teacher perceptions occurred, the Contextual Observation Checklist that was a part of the School Analysis Model (SAM) developed for the Louisiana Department of Education (LDE) was utilized. Information collected using the observational checklist ensured that numerous relevant contextual areas were included such as: behavior of the faculty, campus behavior, hallways and playground conditions, custodial services, cafeteria, library and computer labs. This information was summarized in the contextual overview presented earlier in this chapter.

As a result of the case study and documentation provided through teacher interviews, the use of the observational checklist, and numerous symbolic artifacts noted within the school representing latent values for and norms related to the importance of the school were discussed. While observing behaviors on the school campus, particular attention was given to aspects that might reflect dimensions of the school's professional culture, sources that influence teacher self-efficacy beliefs, and evidence of teacher involvement in bottom-up activities to improve school performance.

Cross-Case Analyses

The conceptual framework guiding the current study suggested that demographic factors, elements of the school's professional culture, strength of teacher's self-efficacy, and level of involvement in decision-making could be associated with school effectiveness. The two schools selected as a part of Phase III case studies represented two socioeconomic and school performance extremes in

terms of the percentage of students on free and reduced price lunches and levels of school effectiveness as measured by the school performance score (SPS). Table 5.1 provides a quantitative comparison of the two schools.

Four patterns emerged from the analysis of teacher responses that were categorized within the constructs of interest in the study: school culture, self-efficacy beliefs, and decision making. School culture as measured by the RSCEQ-S represents the norms, values, and beliefs that sustain the professional environment. Elements have been labeled in this study as shared leadership and vision, collegial teaching and learning, and professional commitment.

One interesting pattern was the importance given to the School Performance Score (SPS). Teachers in high and low poverty teaching conditions did not perceive the SPS as having an affect on pedagogy. Two indicators were used to make this judgment. First, the teacher's interviewed in both schools were somewhat aware that there was a school performance score for their school and all of them had an idea that it reflected either an improvement or decline. Secondly, all of the teachers indicated that despite the score calculated, or labels published, they continued to teach as they always have and believed was best for the pupils they taught. A second interesting pattern to emerge was that despite all the beliefs expressed by teachers that their was no real affect on the classroom linked to SPS labels they were all very aware of the affect of accountability and high stakes testing in general. Two examples bear this out. First, teachers in the higher performing school visited were very cognizant of how the activities linked to accountability at their school had narrowed the breadth of what pupils learned by an increased focus on tested concepts. Second, teachers in the lowest performing school were also cognizant of

Table 5.1

Quantitative Comparison of the RSCEQ-S (Teachers' Actual Perceptions), TEBS-S, and TDDS in Schools Visited (n=2 schools).

	High Flyer Elementary			Goodwill Elementary		
SES Percentage of students on free and reduced price lunch	19.0%			94.3%		
Percentage of Students Minority	15.8%			99.5%		
Percentage of Students Sp. Ed.	10.6%			6.9%		
SPS	101.6			32.2		
RSCEQ-S	M	SD	M%Max	M	SD	M%Max
Shared Leadership	22.08	2.99	78.9%	20.26	3.81	72.4%
Professional Commitment	22.15	1.46	79.1%	19.83	3.81	70.8%
Collegial Teaching and Learning	15.62	2.10	55.8%	14.94	3.40	53.4%
TEBS-S						
Classroom Mgt.	21.46	2.11	89.4	20.76	2.59	86.5%
Communicating/ Clarifying	21.54	2.33	89.8	20.71	2.39	86.3%
Accommodating Individual Differences	18.23	3.54	76.0%	19.48	2.83	81.2%
Instilling Higher Order Thinking Skills	13.08	2.02	81.8%	12.88	2.42	80.5%
TDMS (Have Opportunity)						
Core Technology	23.20	4.71	72.5%	19.54	7.53	61.1%
Operations/ Maintenance	6.08	.95	30.4%	7.00	2.29	35.0%
Work Setting/Context	7.38	1.94	61.5%	7.34	2.91	61.2%
TDDS*	**Deprivation Index**			**Deprivation Index**		
Core Technology (Range 2-8)	4.89			7.72		
Operations/ Maintenance (Range 3-7.28)	4.46			6.51		
Work Setting/ Context (Range .32-1.22)	.32			.92		

Note. TDDS index is calculated as the difference between the actual and the desired level of decision making.

the demands for accountability and resented that they had to deal with its effects on two levels: student discipline and curriculum content. The teachers interviewed believed that both the quantity and quality of their teaching was affected by a lack of continuity (due to disciplinary interruptions) and time lost (generally less being taught). A third pattern to emerge was the linkage between teacher perceptions of the school's contextual environment and actual levels of student achievement. Activities and messages that conveyed the importance of the pupils, teachers, and learning were evident in both environments. Clippings of student activities from newspapers, framed pictures and statements of inspiration, decorations that conveyed school success and community involvement, surrounded teachers in the higher performing school visited by students and their parents. In addition, the school janitors attended daily to the cleanliness of the colorfully painted and decorated school. Teachers in the lowest performing school visited were surrounded by warnings about sexual harassment and locations of the nearest child molesters. Dusty plaques, outdated trophies, unsanitary and ill equipped lavatory conditions, and lack of importance given to the cleanliness of the physical environment conveyed school malfunctions and minimized its importance. A fourth pattern to emerge was how the sources of information conveyed about the effectiveness of schools, theoretically tied to personal belief systems, had affected the beliefs by teachers about the limitations of their own effectiveness. Comparisons of the related qualitative findings are summarized on Table 5.2.

Teachers interviewed during Phase III, did not place importance on the school performance score, though the reasons why this was the case differed.

Table 5.2

Qualitative Comparison of Teacher Perceptions of the Schools Visited (n=12 teachers).

High Flyer	Goodwill
School Culture	
School Administrators Facilitate and Target Success	School Administrators Try Hard and Target Improvement
Teachers Meet Informally	Teachers Required To Meet
Parents And Pupils Involved	Parents And Pupils Uninvolved
Janitors Continuously Clean Campus	Janitors Rarely Visit Campus
Janitors Viewed As Part of the Team	Janitors Are Viewed As Lazy
Janitors Perceived as Caring	Janitors Perceived as Reluctant
Teacher Self-Efficacy Beliefs	
SPS Not Important (Surpassed)	SPS Not Important (Unreachable)
Teachers die to teach at, and parent fight to get their kids in, this school.	Several teachers believed they were not what was best for the children, but were asked to come teach because no other teachers would.
Teachers took initiative to meet the professional needs of one another and to fill gaps left by inadequate approaches of the LEA. "We meet in the lunchroom after... [LEA training] to fill in the gaps..."	Teachers were waiting to be shown how to get the results from "these" kids. Everyday I try to convince myself "we're going to be better...but in my heart...I don't feel it."
Teachers believed they teach effectively, have administrative support guiding them in strategies to improve student achievement. "Improvement in the scores are the result of teaching to the test." Teacher did not take credit for this improvement, but gave attributed it to student aptitude.	Teachers expressed beliefs that they knew how to teach effectively and how to make appropriate accommodations, "but not with the whole classroom!" Teachers could not focus on state standards because of the time spent on classroom discipline and inability of children to retain information.
Teacher believed that they get whatever they ask for. Multiple levels of support were evident.	Local school board and parent were viewed as distant and not supportive of the school. No external sources of support were observed.
Involvement in Decision Making	
Academic focus narrowed on tested skills and knowledge.	Academic focus narrowed due to unmet student learning needs.
Teachers feel threatened by goals that focus on raising academic achievement because it narrows and slows down learning.	Teachers feel threatened by goals that focus on raising student academic achievement because they know they cannot accomplish the goal given student aptitude and lack of professional capacity.

Teachers in the higher performing school believed that they had always attended to student achievement in terms of conveying to them needed skills. Therefore, the score was irrelevant. Teachers at the lower performing school, however, lacked concern about the SPS because of their beliefs that the amount of funding and resources actually needed to raise student achievement would "never" be made available.

Teachers in the higher performing school made concessions to classroom teaching in deference to accountability and high stakes testing resulting in an approach to "teach to the test." Other strategies for enhancing learning, such as art and music, were being set aside. Teachers in the lower performing school acknowledged the importance of *showing results,* but exasperated by the inordinate amount of time they spent each day on classroom discipline.

Teacher beliefs about the school environment and ability of the student population were correlated to the school performance score. Teachers in higher performing schools, for example, believed that the school environment provided them with anything that was needed and that the majority of students would do well given their backgrounds. Teachers in the lower performing school, on the other hand, believed that the community had lost interest in the children and in the school and that the majority of students would not do well given their backgrounds.

The sources of information theoretically tied to personal belief systems (i.e., personal mastery, modeling, verbal persuasion, and physiological arousal) were manifest in teachers expressions of their teaching ability. Teachers in the higher performing school, for example, while aware of deficiencies in the support network, interpreted various sources of information in ways that bolstered beliefs in their own

competence. For example, pressure to document teaching activities was said to have slowed down the progress of learning in the classroom. The result of this activity served to increase the teachers' awareness of the volume and quality of their work. In addition, the level of parental involvement was lower than desired by teachers in the higher performing school as a support for children. This lack of support was interpreted to reflect the contemporary parenting and the value for the parental assistance with classroom behavior offset the negative aspects this lack of homework support might have otherwise had on teacher self-efficacy. Professional development needs to target specific student needs were handled by teachers informally. The latest SPS rose from 101.6 to 106.7.

Teachers in lower performing schools, on the other hand, processed information differently. The lack of community involvement left teachers believing there to be a lack of concern for children and views of the school as a dumping ground. Parents were viewed by teachers as not only unable to help with homework, but also hostile when children were disciplined. Teachers in the low performing school expressed that they felt ill equipped to serve an entire student population at-risk. The latest SPS fell (32.2 to 23.2).

Summary of Cross Case Analyses for Research Questions (RQs)

Cross case analyses provide a comparison of teacher perceptions relevant to the contexts for teaching and learning and used to answer to the research questions generated. Research Questions (RQ) 1 and (RQ) 2 were answered with quantitative analyses of the data and reported in Chapter Four. Research Questions (RQ) 3, 4, and 5 were answered through qualitative explorations. These results are presented next.

RQ_3: What qualitative differences in the school's professional culture exists between higher and lower performing schools that can be used to explain the level of school productivity and school holding power?

Shared leadership, in this study, was reflected by teacher's perceptions of the actual degree to which goals for school improvement were shared and ongoing administrative support provided to attain school goals. It was expected that teachers with a strong sense of shared leadership would be knowledgeable about and involved in resolving problems and in providing resources to bring about school improvement. *Collegial teaching and learning* was conceptually defined as the ways in which teachers go about enhancing the teaching and learning environment. It was assumed that teachers with stronger perceptions of the actual degree to which they share responsibility for all student's learning would actively seek professional resources, as well as serve as professional support for colleagues, both formally and informally, in order to resolve difficulties and accelerate success. *Professional commitment* was explored in terms of the value expressed by teachers for ongoing education and the application of educational research in their own teaching and learning practices. In addition, commitment was reflected in beliefs about whether all students can actually learn and the level of extra they provide to help students develop higher order thinking.

In terms of the school's *professional culture*, the findings in this study indicated that the teachers at High Flyer Elementary (a higher performing school) viewed not only the administration, but also the entire community as supportive and involved in student learning. Teachers at Goodwill Elementary (a lower performing

school) on the other hand, were convinced that they were disconnected from the community to the point that no one really cared about what happened to *these kids.*

Teachers at High Flyer explained how the school's administration had ensured they understood state standards and that they felt comfortable with the alignment between these standards and their curriculum. Teachers felt this strategy had set them up for success, but they also conveyed raised this to be a somewhat hollow victory because of the curriculum's narrowed focus and there being so much more to be learned. Teachers at Goodwill Elementary, on the other hand, were not as fortunate and were at a total loss on how to teach this population of students. Not only did these teachers indicate that there were too many programs to implement, but also that it was unclear to them about how to address the individual student needs with these programs. There was a strong sense of hopelessness conveyed by the teachers who had resolved among themselves to wait until *the state gave up on* the idea of improving conditions at *their school.*

There were apparent differences in the approach to child discipline at High Flyer and Goodwill Elementary schools. For example, the teachers at High Flyer Elementary were more relaxed about how the children got from class to class, with no mention to students in the hall about the orderliness of how they arrived from class to class, or whether they talked with one another on the way. Classroom rules were pre-established and posted in the room. Parents were very supportive of the teacher and helped enforce the rules for their child's classroom behavior. Teachers at Goodwill Elementary were focused on the fundamental need to provide classroom discipline and student obedience to commands. Transition from class to class was to be single file, with no talking. Though classroom rules were pre-

established and posted in the classroom, teachers were fearful of parental combativeness and often faced allegations by the students of being treated unfairly.

Formal and informal teacher collaboration was more evident at High Flyer than at Goodwill Elementary. Teachers at High Flyer for example, met informally and regularly in the lunchroom to fill the void left by district level training. Teachers indicated that their needs were more narrowly focused than that offered by the district. Several of the teachers interviewed at Goodwill expressed that they were not of much help to one another and on a number of occasions and for various reasons mentioned how they were not the kind of teacher needed by these kids. In addition, they expressed a sense of regret knowing that they should be meeting with one another more often, and that they should be more involved in networking with the community.

RQ_4: What qualitative differences in teacher self-efficacy beliefs exist between teachers in higher and lower performing schools that can be used to explain the level of school productivity and school holding power?

Self-efficacy was explored in terms of the personal judgments made by the teacher about their own teaching effectiveness. Four dimensions of teaching effectiveness were explored: Managing the Classroom, Communication and Clarification Skills, Developing Higher Order Thinking, and Accommodating Individual Learning Differences. Effective teaching was attributed to teacher's personal beliefs in their ability to create and maintain a classroom environment in which pupil learning is maximized, to engage all learners, including those with disabilities, to develop higher levels of cognitive thinking, and to accommodate individual learning differences. A major theme to emerge involves how the

differences in these two schools pose serious threats to teachers' self-efficacy beliefs in the lowest performing schools through the sources of information typically used by individuals to make personal judgments about their own personal capabilities.

Teachers at both High Flyer (a high performing, low poverty) and Goodwill Elementary (a low performing, high poverty) schools attributed student performance to student aptitude and influence of the home environment. For example, teachers at High Flyer Elementary indicated that the majority of students would do well, but that some *would not get it no matter what* they did. By the same token, teachers at Goodwill Elementary indicated that the majority of their students *do not get it no matter what* they had tried. In addition, teachers at both locations indicated that the pupils presenting the greatest challenge for them are those with parents who have chemical dependencies, problems with interpersonal relationships, or who do not value education in general. An underlying message is that in reality, teachers' face challenges everyday in the classroom that they really believe are insurmountable. This threat to self-efficacy beliefs challenges the level of persistence and resiliency of the teacher to overcome the difficulties encountered.

Teachers at both High Flyer and Goodwill Elementary also indicated the need to focus professional development narrowly, addressing the particular needs of their students. Teachers at both schools mentioned that while large-scale ideas and strategies were interesting, some even inspiring, what they needed were specific to their student needs. Models of effective teaching that were expected to be replicated frustrated teachers at Goodwill Elementary. They needed a model of teaching that was representative of the classroom they faced each day.

Teachers at High Flyer Elementary indicated a strong degree of confidence in their ability to teach effectively. Teachers stated that the goals of accountability and high stakes testing had only helped point out the quality of their work through the documentation now required. Teachers at Goodwill Elementary expressed overall confidence in their teaching effectiveness, but their remarks reflected limitations for the effectiveness at *this school*, with *these students* assigned to their class. Teachers at Goodwill had expressed that the coursework and student teaching had not adequately prepared them for dealing with classrooms in which the majority of the students in the class were in need of special accommodations. This aspect reflects the tendency to situation ones' personal beliefs within the schools' context. Teachers' in the highest performing school were able to utilize challenges of accountability in ways that boosted their self-efficacy, while teachers in the lowest performing school were overwhelmed by the severity of the needs in the classroom. Serious threats to the teachers' sense of personal mastery (said to be the most powerful source of influence) in the lowest performing school were evident.

The shared goal and attention given to the alignment between curriculum and assessment and teacher involvement in strategies to raise student performance made an academic focus at High Flyer Elementary possible. Teachers at High Flyer indicated that knew they would raise student performance given their training and overall student aptitude. This strategy, in part, appeared to pay off according to gains in school performance (i.e., a 5.1 increase in the SPS from the prior year). On the other hand, complex behavioral problems and overwhelming student needs stymied the academic focus for teachers at Goodwill Elementary. Teachers at Goodwill Elementary were confident in the education they had been provided and

felt they were familiar with strategies for accommodating individual learning differences; however, none of these teachers were prepared for an entire classroom of students with special needs and the confrontations they would face with parents. These barriers, in part at least, appear to have cost the school according to losses in school performance (i.e., an 8.1 drop in the SPS from the prior year). The kind of message (i.e., verbal persuasion) sent by this information pose an additional threat to self-efficacy beliefs for teachers in the lowest performing school.

Clearly evident from the theme to emerge in this particular analysis that clarifies the sources that threaten and support teachers' self-efficacy beliefs are the informational disparities between the highest and lowest performing school.

RQ_5: What qualitative differences in teacher involvement in decision making exist between higher and lower performing schools that can be used to explain the level of school productivity and school holding power?

Decisions that directly affect classroom practices were used to describe the *core technology*. The degree to which teachers have opportunities to decide how and what to teach and was used to reflect the level of administrative support for the development of the teachers' professional capacity to improve school performance. In addition, decisions that encourage and support teachers by providing them with opportunities to collaborate with others about how to bring about goals were described under *operations and management*. Examples include how often teachers helped facilitate decisions about spending priorities, recommend strategies for goal attainment, or help plan effective class scheduling was used to gauge the depth of teacher involvement beyond the classroom. Finally, teachers were asked to indicate whether they were involved in decisions that affect the work setting and context for

teaching. For example, whether or not teachers had opportunities to share ideas about how to effectively reassign staff and help develop strategies that affect school productivity, as well as school holding power was examined. These dimensions were used to guide the case studies and determine the level to which teachers perceived themselves as disconnected from decisions that are part of larger plans that target overall school improvement.

Teachers at both High Flyer and Goodwill Elementary were not concerned with making decisions at their school. However, teachers at High Flyer Elementary were actively engaged in making decisions that had affects beyond the classroom. Teachers reflect this in their statement indicating that *we get whatever we ask for here it's amazing*. The decision making deprivation indices at High Flyer (see Table 5.1) were lower than Goodwill Elementary, on all three dimensions measured. Teachers were actually provided with as many opportunities as they believed they should have been relative to core technology, operations and maintenance, and work setting/context activities. Teachers at Goodwill Elementary on the other hand seemed to be on hold as they waited for either abandonment by the state, or ideas and strategies for the *perfect teacher and perfect class* to be delivered. Teachers at Goodwill Elementary explained their lack of involvement as due to: 1) living too far away, 2) lack of commitment (though not lack of desire) to come back to school after hours, and 3) beliefs that the local school board, if approached, would respond negatively as had some parents.

Chapter Summary

Chapter Five presented the results from Phase III of this study. Sampling procedures were explained, methodological issues addressed, and three individual

case study reports were given. Cross-case analyses of two cases were used to answer the research questions generated. Chapter Six provides a summary of the 1) major findings and conclusions pertinent to the hypotheses and research questions, 2) research methodology and design concerns, 3) implications for theory, research, practice, and 4) recommendations for future research.

CHAPTER SIX: FINDINGS, CONCLUSIONS, AND IMPLICATIONS

Chapter Six begins with an overview of the study including the three phases of research completed. Major findings and conclusions are presented in two sections. The first section presents findings and conclusions relative to the study measures. Conceptual validity of the study measures and viability of the conceptual framework developed specifically for this study is included in the first section. The second section presents major findings and conclusions pertinent to the hypotheses and research questions followed by discussion of several issues pertinent to the methodology and research design. The chapter ends with a discussion of the theoretical, research, and practical implications of the findings followed by and recommendations for future research.

Overview of the Study

This study was prompted by federal and state demands to improve student and school performance, which are the goals of accountability systems across the United States. These demands and subsequent educational initiatives fuel the concerns of most educators for maintaining the quality of education, which is challenged by the degree of attention and volumes resources allotted to cycling targets of education reform (Britell, 1980; Cuban, 1990). Of particular interest in this study was understanding more about the extent to which teacher personal variables (e.g., teacher self-efficacy beliefs) and school contextual variables (e.g., schools' professional culture and teacher involvement in decision-making) contribute to student and school performance.

The study was also prompted by several concerns, to be covered more fully later in this chapter. First, was the need expressed for additional studies that examine the relationship between school culture and school effectiveness (Firestone & Louis, 1999). A second concern emerged as a result of the focus of this study involving faulty

methodologies upon which prior research findings concerning teachers' self-efficacy have been grounded (Dellinger, et al., 2001). A third concern was the need to clarify how teacher involvement in decision-making contributes to school effectiveness (Taylor & Bogotch, 1994). Finally, this study continues a line of inquiry that explores elusive aspects of school effectiveness, but extends the examination by looking at teacher personal and school contextual variables as contributors of effective and ineffective schools.

The purposes of this study were fourfold to: 1) develop a conceptual framework to guide the study; 2) continue the development of a new measure of teacher self-efficacy beliefs grounded in self-efficacy theory and linked to effective teaching and learning; 3) determine whether any combination of the study variables could be used to explain current conditions of elementary schools; and 4) augment the knowledge base in educational administration through explorations of the relationship between school culture, teacher self-efficacy beliefs, decision making, and their linkages to school effectiveness.

This study was designed to explore dynamic interactions among 1) the school's professional culture, 2) teachers' self-efficacy beliefs, 3) teachers' involvement in decision-making, and 4) linkages among these variable to school effectiveness (see Chapter One, Figure 1). In the conceptual model used to guide the study, schools were envisioned as complex organizations and dynamic social systems vulnerable to external sources of support and/or neglect (Getzels & Guba, 1957; Getzels, Lipham, & Campbell, 1968). In addition, change was viewed as an ongoing nonlinear process of a school "system in action" (Paul, 1977; Fullan, 1993; Getzels, Lipham, & Campbell, 1968, p. 151).

In this study, the behavior of teachers was understood as a dynamic force that alters and is altered by elements of the schools' professional culture, the strength of teachers' self-efficacy beliefs, and by teacher participation in decision-making everyday in their school. Previous, independent, efforts to explore these conceptions suggest the existence of a dynamic interplay among this combination of study variables. This study examines whether they can be differentiated in terms of their collective contribution to the schools' effectiveness. Traditional indicators of school effectiveness (school productivity and holding power) were, in turn, portrayed as having a reciprocal (i.e., feedback) effect on the school culture. In sum, the study represents a conceptual and empirical extension of a number of previous efforts to understand more about schools as complex organizations and the multiple organizational variables associated with different conceptions of school effectiveness (Chauvin, 1992; Claudet, 1993; Ellett, 1995; Loup, 1994; Johnson, 1991; Clarke, 1997; Ellett, Logan, Claudet, Loup, Chauvin, & Johnson, 1997).

The next section recapitulates the steps involved in each of the three phases of this study.

The Three Phases of the Study

Phase I

As previously mentioned, the study was conducted in three phases. Phase I involved the development of a new theory-based teacher self-efficacy measure designed to assess teachers' personal belief systems relative to a series of effective teaching and learning activities. The Teacher Self-Efficacy Beliefs Scale- Short Form (TEBS-S) was grounded in social-cognitive theory and conceptions of self-efficacy as a core element of human agency. According to Bandura (1997), self-efficacy beliefs are a primary

determinant of human behavior. The concept of *human agency* suggests that humans, acting as agents, are not simply influenced by their environment, but purposefully act to change their environment as well. Bandura uses a theory of triadic reciprocal causation to explain the processes used by individuals to make judgments of their own abilities to carry out the required behaviors necessary to produce results (Bandura, 1997). The next section reviews the steps taken to develop the TEBS-S measure developed for this study.

Development of the Teacher Self-Efficacy Beliefs Scale

The Teacher Self-Efficacy Beliefs Scale-Short Form (TEBS-S) involved a three-step conceptual clarification process by the research team developing the measure. The first step involved clarifying whether different item stems that linked teacher perceptions to a list of selected teaching and learning activities had different influences on responses to the TEBS-S items. Three 15-item forms with different response formats (Able To; Can Do; Strength in My Personal Beliefs in My Capabilities To) were developed and tested with a sample of 434 classroom teachers. One third of the sample responded to a common set of TEBS-S items, each with one of the response stems. The data analysis results were somewhat unclear. However, examination of the measurement reliabilities for the three different stems supported the *strength of my personal beliefs in my capabilities to...* stem as the best suited for the purposes of this study. At that time, it was also discovered that teacher responses, regardless of the form that they completed, ranged on the high end of the 10-point scale used (e.g., responses ranged from 7 to 10).

The second step involved clarifying and aligning teacher beliefs to relevant activities for which they are currently held accountable, (effective teaching). In addition, teachers were asked to situate their response within the context of their *present teaching situation.* An initial 51-item pool was developed using the content of a comprehensive

teacher assessment and evaluation system designed for assisting the professional growth of teachers (Ellett, 1999). The 51-item survey was administered to 45 experts (i.e., teachers, administrators, and university faculty). These experts were asked to rank order each item in terms of the level of importance and contribution to effective classroom teaching and learning.

The third step involved the selection of the 30 highest-ranking items to be used in the study as identified by the experts. The item set that was selected was judged to have reasonable face validity in terms of the components of effective teaching and learning. In addition, construct validity was enhanced by the alignment between the precepts of self-efficacy theory as a personal belief system and response formats tied to teacher beliefs about their teaching effectiveness as measured by the set of professional capabilities delineated.

Phase II

Subsequent to Phase I of the study in which the TEBS-S was developed, a large-scale data set was collected to refine the study measures and to test the hypotheses and research questions framing the study. Purposive stratified sampling was used to identify the elementary schools to be selected. Schools were first divided into the highest and lowest poverty quartiles (SES), then ranked by their School Performance Score (SPS). Of the total population n=817 of elementary schools to receive a School Performance Score in 1998-99, n=412 schools of were categorized into four groups. Each of the four groups represented high and low SES/SPS structures identified as the following: high poverty/high performing (*demonstrably effective*); low poverty/high performing; high poverty/low performing; and low poverty/low performing (*demonstrably ineffective*). Complete and useable surveys from n=555 teachers in n=34 schools were utilized in

developing the study measures. This number was later reduced to n=512 teachers in n=30 schools to meet response rate criteria established for hypothesis testing and data analysis using schools as the unit of analysis. The group structures represented by the actual participants in the study were identified as follows: high poverty/average performance; low poverty/high performing; average performance/average poverty; and low poverty/low performance (*demonstrably ineffective*).

This second (quantitative) phase of the study was designed to explore relationships between teachers personal characteristics (self-efficacy), school contexts (professional culture, involvement in decision making), and school effectiveness variables (see Chapter One, Figure 1). School effectiveness, in this study, was operationalized by school performance scores (SPS) derived for each school by the Louisiana Department of Education. The SPS represents multiple indicators of school effectiveness including the traditional focus on student achievement scores (school productivity), as well as school holding power (attendance/drop out rates).

Six hypotheses and two primary research questions were generated for Phase II of the study. The hypotheses were focused on testing whether claims could be made that the study variables were related to school effectiveness and that they could be used to differentiate, and thus predict the performance of schools. The research questions answered through the quantitative analyses were concerned with the degree to which the set of teacher personal and school context factors could account for variation in school effectiveness. Three research questions were also developed for a subsequent qualitative phase (Phase III) of the study. These questions, answered through qualitative case study research, were concerned with explanations of how and why the study measures yielded different results in schools with different levels of student poverty.

Building upon the original work of Cavanagh (1997) the Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S) (Teachers' Actual Perceptions), a shortened version of previous measures, was used to examine the norms, beliefs, and values that are indicative of teachers perceptions of the degree of support for ongoing professional growth. It was an assumption of this study that the schools' professional culture serves as a fundamental element that contributes to school effectiveness. The RSCEQ-S was conceptually portrayed as characteristics that reflect deeply held beliefs, norms, and values related to the structure of the schools' culture and approved ways of carrying out ones' professional activities.

The Teacher Decision-Making Scale (TDMS), referred to as the School Decision Participation Scale (SDPS) in previous studies, was utilized to examine the extent to which teachers believed they *were involved* in decision making and the extent to which they believed they *should be involved* in decision-making processes. These aspects were explored for linkages to school effectiveness. Though prior research has failed to show a strong empirical linkage between teachers' involvement in decision-making and school outcomes (e.g., Taylor & Bogotch, 1994), this study examined decision-making as an indirect mediator of school outcomes conceptually portrayed as an embedded aspect related to the school's professional culture. As an indirect mediator of school effectiveness, decision-making reflects the shared norms, beliefs, and values that frame teachers' actual involvement and participation in core activities assumed to enhance school quality (e.g., who, how, what, when related to curriculum enactment, fiscal matters).

Phase III

The third (qualitative) phase of the study involved case study research and the development of contrasting cases in order to add rich descriptions of the school environment and narrative based on more in-depth discussion of the study dimensions with teachers. This method was selected as the best approach in light of the theoretical basis used to derive the hypotheses and research questions, and the desire to describe the school contexts and to better understand the quantitative results generated in Phase II (Yin, 1994). A focus group protocol, contextual observation checklist, school improvement plan, and audiocassette recordings were used as Phase III data collection tools. The protocol that was designed specifically for this study was a semistructured interview made up of a series of initial questions that would be asked at each school, but that would allow for some divergence in order to capture broad ideas and emerging themes from the discussion. The questions were designed to guide the discussion around the conceptions defined as the schools' professional culture, teachers' self-efficacy beliefs, and involvement in decision making. The contextual observation checklist utilized in this study was developed for the Louisiana Department of Education and documents the schools' context as measured by observations of faculty behavior, campus behavior, conditions in the hallways and playground, activities of the custodians, actions in the cafeteria, library, and auxiliary classes offered (Beaudoin, 1998). A preliminary step was taken to test and refine the data collection methodology or tools in a pilot school prior to actual visits and interviews in schools selected for case study. The pilot school was selected based on teachers' prior exposure to research and knowledge of the effects of self-efficacy beliefs and school culture on school effectiveness.

Stratified random sampling technique was used to select from 6-8 teachers from each grade level at each school site. Schools in the case studies were chosen for further in-depth study based on three criteria: 1) their being the best representative of the SES/SPS group into which they were originally categorized, 2) willingness to participate, and 3) quantitative findings were found to be statistically significant. Eight schools were originally identified as extreme cases that could be contrasted. Two schools from each of the four groups identified in Phase II were contacted. Of these eight schools, only two actually agreed to participate in the 60-minute sessions. Sessions were held at the school site and at a time convenient for the teachers in order to enhance participation. One case study represented a high performing, low poverty school, while the other case study represented a low performing, high poverty school. Participating teachers were assured that their responses were voluntary, would be kept confidential, and used only for research purposes. Teachers were asked to clarify and/or discuss unclear responses during the interview sessions to help ensure the accuracy of their responses (Yin, 1994).

Three research questions framed the collection of qualitative data in Phase III. Effort were made to control threats to, as well as maximize, the internal validity, external validity, and reliability through multiple sources of evidence, a documented chain of evidence, and development of a case study database as recommended by scholars familiar with conducting case study research (Yin, 1994). Cross-case analysis of the data collected provided an examination of the differences and similarities in patterns and themes that were tied to conceptions of the schools' professional culture, strength of the teachers' self-efficacy beliefs, and involvement of teachers as decision- makers (Patton, 1990).

The major findings and conclusions are presented in two sections. Section One presents the findings and conclusion related to the construct validity of the set of RSCEQ-S, TEBS-S, and TMDS measures and the viability of the model developed as a framework for the study. Section Two presents the findings and conclusions pertinent to the hypotheses and research questions generated.

Section One: Major Findings and Conclusions: Conceptual Validity of the RSCEQ-S, TEBS-S, and TDMS Measures

Factor Analyses

Factor analyses of the RSCEQ-S (Teachers' Actual Perceptions) data set using principal components analysis and varimax rotations resulted in three factors that were identified in terms related to the norms, beliefs, and values associated with individual behaviors and decisions creating the schools' professional culture. The factor structures emerging were defined as the following: Shared Leadership (SL), Professional Commitment (PC), and Collegial Teaching and Learning environment (CT&L). Major findings generated through factor analyses provides: 1) consistent support for conceptions of the schools' professional culture as a multidimensional aspect of the schools' complex social organization; 2) support for the measure as a viable paper and pencil test; 3) identifiable and reasonable dimensions that reflect the schools' professional culture; and, 4) dimensions that can differentiates teacher perceptions about the schools' professional culture. These findings support the following conclusions: 1) the RSCEQ-S can be used to describe the schools' context; 2) the factors generated represent viable characteristics that describe dimensions that are conceptually and empirically linked to effectiveness; and, 3) the conceptual model developed for this

study is a viable model for understanding linkages between school culture and school effectiveness.

Factor analysis of the TEBS-S data set using principal components analysis and varimax rotations resulted in four factors of self-efficacy beliefs about teaching and learning: Classroom Management (CM), Communication/Clarification (CC), Accommodating Individual Learning Differences (AID), and enhancing the development of Higher Order Thinking Skills (HOTS). Factor analyses supports the following findings: 1) the TEBS-S is a multidimensional measure of teaching effectiveness; 2) the factors generated represent viable characteristics that reflect teacher beliefs that are situated within their present teaching situation; 3) the factors generated represent dimensions that can be used to differentiate the strength of teachers' personal self-efficacy beliefs. The findings suggest the following conclusions: 1) the TEBS-S is a viable paper and pencil test measuring teaching effectiveness; 2) dimensions are interpretable and reflect the strength of teachers' self-efficacy beliefs as tied to effective teaching; 3) the dimensions can differentiate the strength of teachers' self-efficacy beliefs.

Factor analysis of the TDMS (Have Opportunity) data set using principal components analysis and varimax rotations resulted in a three factor solution measuring aspects of decision-making defined as: Core Technology (CT), Operations and Management (OM), and Work Setting/Context (WS/C). The following are findings from these analyses: 1) continued support for conceptions of participation in decision-making as a multidimensional assessment of teachers' involvement in decision-making; 2) the factors identified represent viable dimensions that describe decision making activities; 3)

initial support for the conceptual model used in this study that links decision making to school effectiveness.

Reliability of the RSCEQ-S, TEBS-S, and TDMS Measures

Internal consistency (Cronbach Alpha) analyses were completed on the RSCEQ-S (Teachers' Actual Perceptions), the TEBS-S, and TDMS (Have Opportunity) measures. Major findings of the reliability analyses are presented next.

Internal Consistency

Internal consistency analyses were completed for the RSCEQ-S (Teacher Actual Perceptions), TEBS-S, and TDMS (Have Opportunity) measures and resulted in the following findings: 1) the three RSCEQ-S (Teacher Actual Perceptions) defined as Shared Leadership (SL), Professional Commitment (PC), and Collegial Teaching and Learning (CT&L) demonstrated rather strong reliability coefficients (.82 to .90); 2) the four TEBS-S subscales Classroom Management (CM), Communication/Clarification (C/C), Accommodating Individual Learning Differences (AID), and developing Higher Order Thinking Skills (HOTS) demonstrated rather strong reliability coefficients (.85 to .86); and, 3) the TDMS subscales Core Technology (CT), Operations and Management (OP/M), and Work Setting/Context (WS/C) demonstrated moderate to relatively strong reliability coefficients (.65-.80). These findings support the conclusion that the items comprising each measure are homogeneous and representative of the subscale identified. Additionally supported is the conclusion that the study dimensions can be differentiated among teachers.

Viability of the Conceptual Framework: Schooling Process Model

Viability of the conceptual framework was a major concern of this study. In an attempt to address this concern, mixed-methods were utilized whereby: 1) the conceptual

model provided a theoretical rationale for understanding the process dimensions associated with school effectiveness, 2) quantitative analyses were completed to examine the nature of the measurement constructs and reliability of the data; and, 3) case study research provided school site, qualitative documentation of teacher perceptions. The integration of multiple sources of evidence provided through mixed methods was used to enhance the overall credibility and trustworthiness of the interpretations made in this study.

Criterion-Related Validity

Results of the bivariate and multivariate analyses completed using the set of RSCEQ-S, TEBS-S, and TDMS measures and the TDDS deprivation index support the robustness of the conceptual and empirical associations indicated among the study dimensions. Viability of the full set of measures as multidimensional mediators of school effectiveness was evidenced by the criterion-related validity established. Correlations among the subscales identified and multiple indicators of school effectiveness supported the findings that follow: 1) a strong and positive relationship between the RSCEQ-S/professional commitment and collegial teaching and learning dimensions and school effectiveness, even when controlling for the variations explained by poverty (R^2=.62, F=14.29, p<.000). While poverty accounted for 40% of the total variation in SPS, the dimensions defined as *professional commitment* explained an additional 12%, while *collegial teaching and learning* explained an additional 10% of the variation in the SPS; 2) moderately strong, positive statistically significant correlations were indicated between each of the TEBS-S/Classroom Management and Communication/Clarification and the SPS (r=.38 and r=.39, p<.05, one-tailed, respectively); 3) there was no statistically significant relationship between the TDMS

and SPS. Based on the findings from this analysis the following conclusions were made: 1) the schools' professional culture, as measured by the RSCEQ-S, can be considered a new correlate of school effectiveness; 2) teachers' personal self-efficacy beliefs, as measured by the TEBS-S, can be considered a new correlate of school effectiveness; 3) the decision-making activities as defined by the TDMS (formerly SDPS) have an indirect impact on school effectiveness; and, 4) criterion related validity and results of factor analysis support the viability of the conceptual framework used to guide this particular study.

Section One: Implications of the Findings and Conclusions

Major findings and conclusions based on instrument and conceptual framework development strongly support the viability of the schools' professional culture as an aspect to be understood as a part of the dynamic processes (i.e., involving interactions among the norms, values, and beliefs) that take place within complex social organizations. Furthermore, the theoretically grounded and empirically supported findings in this study imply that the reciprocal interactions among the study dimensions mediate school effectiveness both directly and indirectly through both teacher personal and school contextual variables.

These findings and conclusions have major implications tied to school reform initiatives that target school improvement. Using self-efficacy theory to explain this claim, for example, clarifies that teachers' self-efficacy beliefs are attributed, *not to* their expectations for *student learning, but rather to* their *beliefs in their own teaching effectiveness* in light of the students they presently teach. This is an important divergence that shifts the strategies necessary to make school improvements. Creating support systems for teachers that help them become resilient in the face of repeated

failure or providing not only opportunities for vicarious learning, but also verbal confirmations of success are examples. Also implied from the conclusions offered in this analysis is that an effective school has a professional culture that supports taking the risks (e.g., job stability, competitive salary structures, shared power) involved with building the professional capacity of its teachers through ongoing opportunities for professional growth.

The linkages among the study variables were used to understand their possible mediating effects on school effectiveness. These dimensions were also examined in light of unidentified latent disadvantages introduced to the classroom that are a result of poverty. Quantitative and qualitative explorations in this study were designed to determine whether the strength of the schools' professional culture, teachers' self-efficacy beliefs, and/or involvement in decision-making would mediate any relevant latent effects of poverty on school effectiveness. The next section summarizes these major findings and the related conclusions of the hypotheses and subsequent research questions generated for this study.

Section Two: Major Findings and Conclusions Pertinent to the Hypotheses and Research Questions

This section presents the major findings and conclusions related to the hypotheses and research questions generated. The findings and conclusions are presented in two sections: 1) Major Findings and Conclusions for the Hypotheses (H) and 2) Major Findings and Conclusions for the Research Questions (RQ). Quantitative findings and conclusions are presented first for six hypotheses and two primary research questions, this is followed by qualitative findings and conclusions for three research question generated.

Major Findings and Conclusions for the Hypotheses (H)

Six hypotheses were generated in this study. Each hypothesis was based on prior research findings and the professional literature that suggested statistically significant relationships exist between and among the study variables (e.g., Cavanagh, 1997; Senge, 1995; Wang, Haertel, & Walberg, 1993; Firestone & Louis, 1999). Schools were used as the unit of analysis. Major findings from the quantitative and qualitative methods utilized are presented next. Each is followed by the conclusion(s) derived from the analyses of the data.

H_1: There is a statistically significant positive bivariate relationship between the RSCEQ-S and the SPS.

Findings

Pearson product-moment was used to test this hypothesis. Somewhat mixed support was obtained. All three of the RSCEQ-S subscales were positively correlated with the SPS as originally hypothesized. Given the rather small sample size (n=30 schools) only two of these correlations was statistically significant: RSCEQ-S/*professional commitment* subscale and the SPS (r=.51, p<.01, one-tailed); RSCEQ-S/*collegial teaching and learning* and the SPS (r=.31. p<.05, one-tailed). The relationships between the RSCEQ-S/*shared leadership* and the SPS (r=.30, p>.05) was in the predicted direction, though not statistically significant.

Professional commitment refers to the element of school culture that represents shared values among teachers and reflects the extent to which ongoing learning is pursued and applied as a general way of life. This conception of the learning environment suggests that the professional effectiveness of teachers is enhanced through their own personal values for and commitment to a reflective learning process and to

their commitment to serve one another as colleagues and as a source of help and support within the school organization.

Collegial teaching and learning is defined as a dynamic process of continual growth through which teachers prioritize the need for ongoing learning as an organizational member for the purpose of enhancing teaching and learning. Collaborative efforts are exercised in order to personally and collectively benefit all students and staff. Some examples of collegial teaching and learning include: collaborative work, shared planning, personal and group reflection, dialogues among teachers, and the incorporation of educational research into the daily professional life.

Conclusions

The following conclusions were derived from the findings of H_1: 1) the quantitative results in this study empirically substantiate the claims in the professional literature which suggest school culture is an essential school context variable linked to school effectiveness (e.g., Cavanagh, 1997; Firestone & Louis, 1999); 2) new strategies for school improvement include strengthening the teachers' *professional commitment* and supporting a *collegial teaching and learning environment*; 3) the criterion-related validity of the RSCEQ-S measure evidenced by the validity coefficients suggest the RSCEQ-S as a viable paper and pencil assessment of traditional school effectiveness indicators; 4) elements of the schools' professional culture provide a preliminary source of intervention for addressing school-wide disparities in school performances.

H_2: There is a statistically significant positive bivariate relationship between the TEBS-S and the SPS.

Findings

The quantitative results indicated a moderately strong, positive and statistically significant correlation between the SPS school effectiveness index and the TEBS-S/*classroom management* and TEBS-S/*communication and clarification* subscales (r=.38 and r=.39, p<.05, one-tailed, respectively). The relationship between the TEBS-S/*accommodating individual learning differences*/SPS and TEBS-S/*higher order thinking skills*/SPS (r=.18 and r=.23) was not statistically significant (p>.05), but positive in direction as originally predicted.

The *classroom management* dimension focused on the strength of teachers' personal beliefs about their capabilities to maintain a classroom environment in which learning was maximized and in which high levels of student engagement in learning tasks for all students was provided. The *communication/clarification* construct was used to reflect teachers' beliefs about their capabilities to maximize learning through clear directions, and ability to informally assess and correct student misunderstandings of the learning tasks and/or objectives.

Conclusions

The following conclusions were derived from the analyses completed pertinent to H_2: 1) criterion-related validity of the TEBS-S measure supports teachers' self-efficacy beliefs as a viable dimension of the multifaceted aspects of the school's organization and contributing factor to school effectiveness; 2) the conceptual viability of associating the strength of teachers' self-efficacy beliefs with student achievement can be substantiated empirically; 3) Bandura's theory of self-efficacy beliefs (a cognitive and affective process) is supported by empirical findings in this study which document the association between the strength of teachers' self-efficacy beliefs and traditional indicators of school

effectiveness; 4) the empirically findings in this study are consistent with those of Bandura (1997); and, 5) effective schools supply and organize resources in ways that help strengthen teachers self-efficacy beliefs in a manner that helps them identify and meet classroom challenges.

H_3: There is statistically significant positive bivariate relationship between the TDMS and the SPS.

Findings

In this study, though non significant two of the TDMS subscales (i.e., *core technology* and *work setting/context*) were positively correlated with SPS as predicted (r=.25 and r=.02, p>.05, one-tailed, respectively). In addition, the inverse correlation between the SPS and TDMS/*operations and management* (r=-.23) was in the predicted direction, though not statistically significant. Given the small sample size in this study, the quantitative results from this study failed to confirm the claims of H_3.

Conclusions

The hypothesis above was grounded in prior assertions and speculations from the professional literature about the importance of participation in decision-making and its contribution to school effectiveness (e.g., Office of the Under Secretary of U.S. Department of Education, 2001; Barott & Raybold in Pounders, 1999; Coch & French, 1948). The following conclusions are offered: 1) sample size was not large enough to capture an adequate measure of decision-making; and, 2) the TDMS items are not viable indicators of decision-making activities that are directly relevant to school effectiveness.

H_4: There is a statistically significant negative bivariate relationship between the TDDS deprivation index and the SPS.

Findings

The results in this study failed to confirm claims of H_4. The correlation coefficient between the SPS and TDDS/*core technology*, TDDS/*work setting/context*, and the *TDDS/operations and management* subscales were not statistically significant (r=-.21, r=-.04, and r=-.05, p>.05, one-tailed, respectively) though were correlated in the initial predicted direction.

Conclusions

The TDDS deprivation index was calculated as the difference between the degree to which teachers believe they *should have opportunities* (i.e., ideal) and to which they *have opportunities* (i.e., reality) to participate in various decision-making activities. A low deprivation index indicates teachers' beliefs that their involvement in the activity delineated is sufficient. A negative correlation was predicted since it was believed that the teachers who perceived themselves to be involved (i.e., expressed as a lower TDDS index) would also be linked to schools with a higher SPS.

This hypothesis was grounded in the professional literature and conceptual frameworks on the effectiveness of involving teachers in decision-making. The following conclusions were derived: 1) the TDMS items, thus decision deprivation indices do not adequately meet the theoretically based criteria (i.e., providing salience, efficacy, and efficiency) established for effectiveness (March 1994); 2) the decision-making deprivation index would be more useful if the activities were linked to other dimensions of school effectiveness.

H_5: There are statistically significant, multivariate relationships among the subscales of the school's professional culture (RSCEQ-S), the teacher self-efficacy

(TEBS-S), decision-making deprivation (TDDS) index (independent variables), and the SPS index (dependent variable).

Five major findings were derived from the correlational and multivariate analyses used to test the claims made in H_5. Bivariate correlation coefficients among the study subscales and a simple linear regression using schools as the units of analysis were computed. The findings are delineated below.

Findings

Major findings include the following: 1) a moderately strong, positive statistically significant relationship between the strength of teachers' self-efficacy beliefs in all four domains of teaching effectiveness and the RSCEQ-S (Teachers' Actual Perceptions of)*/Professional Commitment* was indicated; 2) a moderately strong, positive, and statistically significant relationship between all RSCEQ-S (Teachers' Actual Perceptions of)*/Shared Leadership, Professional Commitment, and of the Collegial Teaching and Learning* environment subscales and the TDMS (Have Opportunity)*/Core Technology, Operations and Management, and Work Setting/Context* subscales; 3) the collective effects of the RSCEQ-S, the TEBS-S, and TDDS deprivation index (independent variables) on the SPS (dependent variable) were able to account for 45% of the total variation in the SPS of the elementary schools examined in this study, though when adjusted for sample size and the number of factors as measured by the adjusted R^2, this percentage drops to 16% ($F=10.30$, $p<.20$, two-tailed); 4) stepwise procedures completed as a part of the regression analysis included an accounting for the effects of poverty which explained 40% of the total variation in SPS of elementary schools, while the RSCEQ-S/*Professional Commitment* dimension was able to explain

and additional 12% and the RSCEQ-S/*Communication/Clarification* dimension another 10%.

Conclusions

The findings listed above were used to substantiate claims made in H_5. The following conclusions were drawn: 1) the strength of teachers' self-efficacy beliefs in their own teaching effectiveness mediates the schools' effectiveness; 2) self-efficacy beliefs are mediated by the shared norms, beliefs, and values that reflect the quality of the professional learning environment (RSCEQ-S); 3) teacher participation in decision-making is to be understood as a fundamental reflection of culturally supported values for ongoing professional growth; 4) the set of measures (RSCEQ-S, TEBS-S, and TDMS) are useful for clarifying process dimensions linked to school effectiveness; and 5) effective schools reflect shared norms, beliefs, and values for ongoing professional development of its teachers and successfully structure the environment in ways that allow teachers strengthen their personal self-efficacy and participate in decisions involving student learning.

H_6: There are statistically significant differences in the magnitude of teacher self-efficacy (TEBS-S), school culture (RSCEQ-S), and level of decision-making deprivation (TDDS) in the highest and lowest performing elementary schools as identified by their school performance score (SPS).

Findings

Results from the statistical analyses completed in this study were used to test H_6. ANOVA procedures yielded the following findings: 1) the RSCEQ-S (Teachers' Actual Perceptions) and TEBS-S subscales can be used to differentiate teacher perceptions of the schools' professional culture and personal self-efficacy beliefs in elementary schools;

2) no significant differences were found between the groups in this study in terms of teacher involvement in decision-making; 3) schools in Group 2 (lower percentage poverty/higher performing schools) differed most from schools in Group 4 (higher percentage poverty/lower performing schools) on all three dimensions of the RSCEQ-S (i.e., school's professional culture) and the TEBS-S/*Communication/Clarification* beliefs; 4) schools in Group 2 (lower percentage poverty/higher performing schools) differed from schools in Group 3 (mid-range percentage poverty/mid-range school performance) on dimensions of RSCEQ-S/*Professional Commitment* and the TEBS-S/*Classroom Management, Communication/Clarification*, and *Instilling Higher Order Thinking Skills* subscales; 5) schools in Group 2 (lower percentage poverty/higher performing schools) differed significantly from those in Group 1 (higher percentage poverty/mid-range school performance) on the RSCEQ-S/*Professional Commitment*; 6) using the set of measures, results from a discriminant function analysis indicated that collectively the study variables were best able to correctly classify schools in Group 1 (higher percentage poverty/mid-range school performance). The linear discriminant function model indicated TEBS-S/*Communication/Clarification*, TEBS-S/*Classroom Management*, and the TDMS/*Work Setting/Context* as the most important contributors in the predictive model.

Conclusions

The quantitative findings generated the following conclusions: 1) both the RSCEQ-S and the TEBS-S measures represent viable theory and research-based measures that can be used to assess the quality of the school environment and target needed school reforms accordingly; 2) there is a need for theory-based revisions to the TDMS (formerly SDPS) measure that refines or defines a new set of decision-making

activities that are theoretically and conceptual linked to school effectiveness; 3) there is strong evidence to conclude that there is a critical need to target improvements to the schools' professional culture as a fundamental strategy for reducing performance disparities in the states' poorest schools; 4) there is strong evidence to conclude that there is a critical need to attend to teachers' self-efficacy beliefs as a preliminary intervention used to reduce performance disparities in the states' poorest schools; 5) strategies to strengthen the schools' professional culture and support teacher self-efficacy beliefs are insightful, theoretically sound and research-based approaches that hold promise of meeting the demands of accountability and challenges of school improvement.

Major Findings and Conclusions for the Research Questions (RQ)

Two quantitative research questions and three qualitative research questions were generated in this study. Research questions were developed to explore the nature of the relationships among the study variables measured by the RSCEQ-S, TEBS-S, TDMS, and TDDS deprivation index. Using mixed methods, the findings for each research question are addressed first quantitatively and then qualitatively. The conclusion derived from these analyses is then presented for each question below.

Quantitative Research Questions

RQ_1: How much of the variation in the school performance scores can be explained by school mean scores on the RSCEQ-S (Teacher's Actual Perceptions), TEBS-S, and TDDS beyond that accounted for by the socioeconomic status of the student population (SES)?

Findings

Results using stepwise regression technique was best able to answer RQ_1. *SES* was the first variable to enter the regression equation (R=.63, F=18.25, p<.000). At step

two, however RSCEQ/*Professional Commitment* entered as the second strongest predictor given the first (R=.72, F=14.69, p<.000) and explained an additional 12% of the total variation in SPS. RSCEQ-S/*Collegial Teaching and Learning* entered at step three as the third strongest predictor, given the first two predictors (R=.79, F=14.29, p<.000) and explained an additional 10% of the total variation in SPS. No other variables entered the equation as statistically significant at the .05 level established for entry into the model. Combined, this particular predictive model accounted for 62% of the total variation in School Performance Scores.

Conclusions

Based on these findings the criterion related validity of the RSCEQ-S as a dimension of school effectiveness using the SPS, which is made up of traditional school effectiveness indicators (student achievement and attendance) was supported. Predictive and concurrent validity was established for the RSCEQ-S/*Professional Commitment* and RSCEQ-S/Collegial Teaching and Learning dimensions as predictors of variations in school performance.

RQ_2: Is there some combination of the study variables that measures teacher's perceptions (i.e., about school culture, beliefs in personal capabilities, and level of involvement) that can be used to discriminate between high and low performing schools?

Findings

General linear model procedures were followed in completing the discriminant analysis statistical technique used to predict SES/SPS (criterion) groups. Predictors included responses on the RSCEQ-S (Teacher's Actual Perceptions), TEBS-S, TDMS (Have Opportunity) subscales. The following findings were indicated: 1) considering all groups, and scores on the variables in the study, only 42.75% of the cases were correctly

classified (57.25% misclassification rate); 2) the set of measures used in this study did correctly classified 72% of the cases in Group 1 (high poverty, average performing schools); and, 3) given the findings from this analyses (i.e., sample size, misclassification rates, useable responses) continued explorations are advised.

Conclusions

The findings from this question suggest the following conclusions: 1) the study variables can be used to predict the SES/SPS Group 1 (high poverty/average performing schools); 2) inability to control certain threats to internal validity (e.g., external events; statistical regression) diluted the findings; 3) too many variables were used to predict group membership thus, diluting the findings; and 4) in this study demonstrably effective schools (high poverty, high performing) initially identified did not participate.

Qualitative Research Questions

Detailed descriptions of two school environments, one school representing Group 2 (high performing/low poverty) and one school representing Group 4 (low performing/high poverty), were provided in Chapter Five. Comparative analysis was used to explore the differences and similarities in the study variables generating statistically significant quantitative results. Major findings relevant to this line of inquiry are summarized below.

RQ_3: What qualitative differences in the school's professional culture exists between higher and lower performing schools that can be used to explain the SPS school effectiveness indicator?

Findings

Constructs of the schools' professional culture in this study were defined as Shared Leadership, Professional Commitment, and Collegial Teaching and Learning.

There were two themes to emerge from the case study research related to the schools' professional culture. The first theme to emerge was the teachers' disagreement with the goals of education focused on increasing student performance. Though, teachers were appreciative of the direct administrative assistance in helping them accomplish this goal in the higher performing school. However, it was obvious from their expressions they were disappointed in the approach to teaching and learning and the loss of volume and quality previously offered to children. From the perspective of teachers in the poorest performing school, on the other hand, the goal to raise student performance was impossible to achieve. Though they were reluctant to admit this preconceived notion of defeat and provided a number of rationales to indicate they would try to meet the goal, their disappointment and frustration was obvious from their expressions that suggested weak professional guidance and support at the time of this visit. The second theme to emerge involved the fundamental coping strategies teachers used to deal with weaknesses in the schools' professional culture. For example, teachers in the higher performing school discussed how they had *always* circumvented weaknesses in the professional development they experienced in district level training (i.e., meeting informally to discuss strategies and share resources). Teachers in the lower performing school, on the other hand, were just discovering the external resources available to them, and were meeting with one another to discuss professional ideas.

Conclusions

Though teachers in both the higher and lower performing school did not agree with the focus on improvements to student achievement scores, there were differences in the schools' professional culture that resulted in different decisions and behaviors that ultimately had an impact on the performance of the school organization. Scores in the

higher performing school went up, while scores in the lower performing school actually fell.

Shared leadership in this study was evidenced by the collective behaviors of individuals sharing the goal to raise student achievement, but did not necessarily reflect shared values for that goal. Furthermore, the successful attainment of the goal to raise student achievement did not fulfill the teachers' sense of professional commitment to teaching and learning as shown in the highest performing school. In addition, providing an abundant supply of resources to teachers can be easily misconstrued as an effective strategy for addressing the needs in poor schools, yet is actually ineffective when used to merely secure funding. Teachers were overwhelmed in the lowest performing school by prospects of having to faithfully implement multiple programs each with different approaches to instruction. From these observations it can be inferred that the quality of shared leadership is influenced by the behaviors and decisions made about how to achieve the goals of education. In this study, differences in shared leadership involved the focus of achievement (student achievement vs. increased funding) and the kind of assistance (strategies to raise scores vs. implementation of multiple programs) provided.

Professional commitment and *collegial teaching and learning* constructs defined in this study were part of a second theme to emerge that involved differences in the teachers' behaviors when addressing weaknesses they felt were in the schools' professional culture. Teachers in the higher performing school, for example, took initiative to fill in the professional gaps left by district efforts to provide training in an efficient manner (i.e., large groups) by meeting informally at other times. Teachers in the lower performing school, on the other hand, were aware that they should be more involved but for a number of reasons did not believe that their extra effort would matter.

Clearly evident from the two case studies were differences in the teachers' shared behaviors to work collaboratively and diligently seek sources of professional support to address their classroom challenges.

RQ_4: What qualitative differences in teacher self-efficacy beliefs exist between higher and lower performing schools that can be used to explain variations in school productivity and school holding power as measured by the SPS?

Findings

A major theme to emerge from cross case analysis of the case study research was the disparity in threats to personal self-efficacy beliefs. The following findings were indicated: 1) teachers perceived the severity of student needs in their classrooms differently in the highest and lowest performing school, thus increasing the challenge; 2) teachers perceived the number of students in the classroom with unstable home learning environments to be greater in the lowest performing school than did teachers in the highest performing school; 3) external social experiences with parents and the community were more positive for teachers in the highest performing school than for teachers in the lowest performing school; and, 4) self-appraisals of teaching effectiveness differed significantly between teachers in the highest and lowest performing school, as evidenced by references to their own capabilities.

Conclusions

The strength of personal self-efficacy beliefs is attributed to four major sources of influence: personal mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal. Self-efficacy beliefs are part of an ongoing adaptive self referent interchange that can influence aspirations, level of effort expended, and persistence especially when faced with repeated failure (Bandura, 1997).

The focus group protocol was developed to examine teacher perceptions of the schools' professional culture, self-efficacy beliefs relative to the four domains of teaching effectiveness and present teaching environment, and involvement in decision making. Also utilized was the contextual observation checklist and school improvement plan.

The findings generated by RQ_4, discussed in more fully in Chapter Five, were used to draw the following conclusions: 1) teachers in lower performing schools face greater threats to the strength of their self-efficacy beliefs in the lower performing school which are undermined by complex classroom contexts in which they must be able to clearly communicate learning objectives and clarify student learning; 2) the motivation and persistence required to communicate learning objectives and clarify student misunderstandings in learning is challenged by the number of students having learning difficulties in the classroom; 3) the lack of control over external environmental factors that affect the learning of the pupils threatens the level of effort teachers expend in the area of communication/clarification; 4) the complexity in the use of multiple educational programs to be implemented challenges the personal beliefs of teachers in their abilities to communicate effectively with their pupils; and, 5) teacher comparisons of their present teaching situation (i.e., classroom/school contexts) with personal factors (i.e., self-efficacy beliefs) and use them to make judgments about the degree of effort needed and personal capability required to be successful.

RQ_5: What qualitative differences in teacher involvement in decision making exist between higher and lower performing schools that can be used to explain variations in school productivity and school holding power as measured by the SPS?

Findings

Though there were no statistically significant quantitative findings related to decision-making and school effectiveness, this concept was also explored in terms of its linkage to the schools' professional culture. The qualitative findings suggested that teachers in the higher performing school were part of a well established network of professional communication and they were regularly involved with activities to develop the local curriculum and in the decisions made to target specific student achievement.

Conclusions

Further explorations of decision making are warranted within the contexts of the schools' professional culture. In addition, modifications to the TDMS are warranted that provided a theoretically sound and research-based set of activities that are tied to school effectiveness.

Section Two: Implications of Major Findings and Conclusions Pertinent to the Hypotheses and Research Questions

This section provides a discussion of the major findings and conclusions pertinent to the hypotheses and research questions framing the study. Implications for future research, theory development, and practice are presented following the discussion. The findings in this study have verified an important theoretical association between teacher's actual perceptions of the school's professional culture, the strength of their self-efficacy beliefs, the dynamics of complex social systems, and their combined linkages to school effectiveness.

First, Getzel's theory of schools as complex social systems portrays schools as organizations having unique, multiple cultures and climates that are driven by the norms, beliefs, values, and perceptions of individuals that interact within them (1968). The

institution is made up of roles and expectations fulfilled by the "actors," while the individuals' personalities and dispositions comprise the observed "social behavior" (Getzels et al, 1968, p. 58). An important aspect of the theory relevant to this study is the idea of an ideal level of congruence between the goals of the social system and goals of individuals in those systems. Of additional importance is the degree of strain between the demands of the institution and level of support that supports the independent growth (i.e., autonomy) of the individual (Getzels et al., 1968, p. 111). Using Getzels theory to explain, the schools' professional school culture must not merely support "cheerful compliance to the status quo" but support the individuals' "personal commitment to ones' own standards and beliefs (p.111)."

In this study the measures were able to differentiate both teacher personal (e.g., self-efficacy) and school contextual (e.g., school culture and involvement in decision-making) dimensions according to groups that were stratified by levels of school performance and percentages of poverty. Teachers in lower performing schools, who also dealt with a greater degree of poverty, were documented to have weaker perceptions of the school's professional culture (i.e., leadership, professional commitment, and collegiality) than were teachers in higher performing schools who dealt with less poverty. Additionally, while the teachers in the lower performing school believed that their own professional commitment and collegiality were key factors to success of the school, they lacked the motivation to engage too heavily in extracurricular activities. Teachers in this study from the lower performing school also believed that the community viewed their school as a 'dumping ground' and saw parents as uncaring.

Ironically, the teachers' perceptions were not aligned with results from an earlier survey conducted by the school administration, in which parents indicated that they

believed their children received *an above average* education at the school. Both quantitative and qualitative findings in this study supported the conception of schools as complex social systems made up of multiple norms, values, and beliefs that can maintain either accurate conceptions and/or misconceptions about schools.

The case studies yielded other interesting results pertinent to the schools' professional culture and school effectiveness. For example, teachers in the higher performing school had more visible professional networks provided through both informal and formal sources than did teachers in the lower performing school. The dynamics in the lower performing, on the other hand, reflected a disjointed professional network. Specifically, while school level reforms in the lower performing school recently targeted to specifically help teachers in this area, they were not fully implemented when visited as a part of this study. It was apparent that teachers in the lower performing school had yet to be exposed to potential sources of professional support.

Another finding through case study explorations was that the teachers *in both* the higher and lower performing schools in this study indicated that *not all students could learn.* That is, the teachers viewed there to be limits on some students' learning potential, in spite of any efforts that they, as teachers, might make. Teachers from both schools grounded this belief using the same rationale suggesting that student learning is undermined most by family difficulties (e.g., parental conflict, drugs, unstable home environment, lack of value for education) that are beyond their control. This fundamental belief is core to understanding culturally embedded differences between the rhetoric and realities of education.

Finally, it was learned through case study research that teachers in the higher performing school believed that they had substantially more students in their classrooms that were already performing well and linked that performance to student ability. Teachers in the lower performing school indicated their belief that they had substantially more students in their classrooms that were have learning difficulties that were exacerbated by dysfunctional home learning environments. This finding documents how teachers view school contextual variables and is useful for making inferences about the behavior and decisions made that perpetuate and sustain the schools' professional culture.

Second, Bandura's (1997) theory of self-efficacy was supported in this study. An important finding was that teachers in the higher performing school had stronger self-efficacy beliefs overall than did teachers in the lower performing school. In addition, teachers' self-efficacy beliefs in terms of their *abilities to manage the classroom* and to *communicate and clarify* learning and misunderstandings were associated with school performance (r=.38 and r=.39, p<.05). Case study research showed *how* teachers in the lower and higher performing school approached the delivery of effective teaching tasks differently. This is discussed more fully in the conclusion sections that follow.

Bandura (1997) explains efficacy as a generative capability in which the individual integrates cognitive, social, emotional, and behavioral subskills in ways that effectively bring about goals. However, regardless of one's level of skill, optimal performance varies from one situation to another and is dependent upon the personal beliefs of the individual at any given time (Schwartz & Gottman, 1976 cited in Bandura, 1997, p.37). Prior research has shown that skills are "easily overcome by self-doubt" (Bandura & Jourden, 1991; Wood & Bandura, 1989 cited in Bandura, 1997, p.37).

Others studies have found that for women, the majority responding in this study, self-efficacy beliefs are enhanced when "significant others have confidence in them and express that confidence to them more than mastery experiences (Zeldin and Pajares, 2000, p.239). Conclusions presented in the following section are based upon these precepts that are a part of the theory of self-efficacy.

In terms of *human agency*, a term used by Bandura (1997) to indicate the variety of goal directed behaviors and activities engaged in by individuals, teachers in the higher performing school were self-directed. In the absence of direct training on how to deal with specific student learning difficulties, for instance, teachers in the higher performing school (and with stronger overall self-efficacy beliefs) proactively generated their own informal, professional system of support. This activity demonstrated how the teachers in this study overcame ineffective professional social structures by establishing alternative structures to meet their professional needs.

Teachers in the lower performing school, on the other hand, accepted constraints on professionalism without questioning or circumventing the dysfunctional structure. This aspect of human agency is part of the dynamic interplay discussed in the theory of self-efficacy, and which is *rooted in social systems* (Bandura, 1997, p. 6).

Qualitative explorations of these dimensions revealed that teachers in both the higher and lower performing schools had similar beliefs about their capabilities to teach effectively in terms of the four TEBS-S constructs examined in this study. In addition, all the teachers interviewed attributed student performance to student aptitude. Significant relationships however were found between two of the TEBS-S constructs and SPS.

Case studies indicated that the strength of teachers' beliefs in their capabilities to the carry out the TEBS-S tasks of effective teaching and learning was attributed to the effectiveness of classroom behavior management plans and to the level of parental support for them in the higher performing schools. These mastery experiences with success and external sources of support for their plans stand in sharp contrast to those beliefs expressed by teachers in the lower performing school who indicated that they were regularly confronted by parents and by repeated challenges to their authority in the classroom by their pupils. This finding supports Bandura's theory of the effects of sources of information (e.g., personal mastery, physiological arousal, verbal persuasion, and vicarious learning) on personal self-efficacy beliefs.

Third, and finally, a number of theories of decision making indicate that in order for involvement in making them to be effective the decisions must provide: salience, efficacy, and efficiency (March, 1994). That is, decisions must be 1) personally relevant, 2) linked to beliefs that an impact will be made, and 3) no better alternative exists. This study has contributed to the knowledge base by confirming the findings of prior studies (e.g., Taylor & Bogotch, 1994) that there is no direct linkages between the TDMS measure and school effectiveness. An important distinction was made among the decision-making dimensions, however, that seemed noteworthy. For purposes of school improvement the TDMS measure was not able to differentiate those activities in which decision-making could be conceptually linked to school effectiveness, with the exception of activities labeled as core technology (i.e., *what and how to teach*). The relationship between core technology and school performance was somewhat weak, but significant and positive in direction. Stronger relationships, however, were found between decision-making and the professional school culture.

Teachers in both the lower and higher performing schools reflected some degree of vulnerability to external pressures generated by high stakes testing. An important finding was that high stakes testing created a tendency for teachers to defer their own judgment to that of other officials. In the higher performing school, teachers could not be sure that what they thought students should know would be tested. This situation created enough 'self-doubt' to encourage teachers to make sure they were *teaching to the test*. In the lower performing school, teachers did not believe they could overcome the barriers presented daily by high need students who did not seem to retain knowledge from day to day or even hour to hour. This situation created barriers that for teachers with low self-efficacy would result in reduced motivation and effort.

Qualitative explorations did reflect that teachers in the lower performing schools expressed greater desires to be more involved in various decision-making activities than did teachers in the higher performing school. As mentioned in the previous section, teachers in the higher performing school expressed the degree to which they were involved in activities directly impacting classroom practice. This construct was defined as the *core technology* in this study. Teachers in the lower performing school, however, were just beginning to implement plans to involve teachers in this process.

Methodological and Design Issues

Several methodological and design issues emerged during this study that must be taken into consideration. The first issue was the level of subjectivity attributed to the researcher, as a data collection tool, which may have presented some bias in the findings (Patton, 1990). Because of personal interest, greater attention was given to the general interpersonal dynamics of the behaviors observed than to strict adherence to conceptual definition of the study measures. In addition, conceptions of the professional culture,

teachers' self-efficacy and linkages between them are still somewhat new. Therefore, the expertise of the researcher is limited. Though this issue was handled through careful documentation of teacher responses in the individual case study reports, room for omission of other important conceptions may be possible.

A second issue taken into consideration was whether or not the sample size ($\underline{n}$=555 teachers and $\underline{n}$=34 schools) was adequate for the purposes of this study. While some decision-making rules were maintained (e.g., number of subjects per item), others were relaxed (e.g., response rates considering teacher to faculty ratios). It was determined that for the purposes of this study, the sample size was adequate for both quantitative and qualitative analyses.

A third methodological concern to arise was the lack of participation after the study was initiated. The unwillingness of principals and teachers to participate in the study was unexpected, in light of previous agreements obtained. Given the time frame for this study this presented difficulty in completing the study as originally designed. In part, the lack of participation can be explained by an increased demand placed upon teachers by state and federal mandates to increase documentation of student performance and discontent with the current state salary structure. Under these conditions, administrators became unwilling to obligate the teacher's time. Several principals and superintendents made it clear to the researcher that no effort would be made to pressure teachers to complete any part of the study, at any time.

Another methodological concern to be taken into consideration involved the scaling of the teacher self-efficacy beliefs measure. Theorists were concerned about development and use of self-efficacy scales that were reduced from 100 points to 10 points (e.g., Bandura and Pajares). Scales were reduced even further in this study to a 4-

point scale. Self-efficacy theorists believe that such a reduction in scaling, consequently, reduces the degree of variability in responses.

However, the findings from preliminary field test conducted during this study did not bear out this concern. That is, results from the study demonstrated that teachers who were given the 10-point scale rated all responses above 7 and those given the 4-point scale responded similarly (i.e., mean item response ranged from 3.1 to 3.6). For the purposes of this study, the interpretation of self-efficacy scores must take into consideration the relative lack of variability in teacher beliefs about the effectiveness of their own teaching. In light of what is known about this conception low variability in self-efficacy beliefs was tolerated and for this study was not of concern.

Implications for Theory, Research, and Practice

Implications for Theory

The study findings support the conceptual framework developed specifically for this study which integrated multiple theories as a way of understanding the dynamic processes that might be associated with school effectiveness. In addition, the conception of school effectiveness was broadened to include dimensions that reflect elements of the schools' professional culture and teacher's self-efficacy beliefs. From the conclusions in this study the following implications for theory were apparent: 1) teacher personal variables (self-efficacy) and school contexts (schools' professional culture) are viable dimensions in models of school effectiveness; 2) teachers' self-efficacy beliefs about their own teaching effectiveness and the schools' professional culture represent viable and identifiable constructs that are unique to each school; 3) future inferences about school effectiveness should include questions of the quality of the schools' professional culture; 4) theories of schools' as complex social systems encompass the social cognitive

subtheory of self-efficacy; and, 5) the dimensions explored in this study represent desirable educational values in terms of a professional environment and positive consequences (see Borg, Gall, Borg, 1996; Messick, 1995) for teachers as professionals and students as learners and should be further explored.

Implications for Research

The following suggestions are implications for future research: 1) additional studies are needed that explore the dimensions of the schools' professional culture and its link to personal self-efficacy; 2) additional research is needed that identifies the sources of teachers' self-efficacy beliefs that strengthen multifaceted aspects of effective teaching; 3) criterion related validity of the RSCEQ-S and TEBS-S measures support their use as a viable correlate of school effectiveness; and, 4) traditional correlates of school effectiveness (e.g., strong leadership, emphasis on basic and higher order skills, a safe and orderly environments, expectations that all children can learn under appropriate conditions, and continuous assessment of students and programs) should be coupled with elements of the school's professional culture.

Implications for Practice

The study's findings have provided essential, theoretically grounded and researched-based linkages to school effectiveness. The following are some implications for practice: 1) the disadvantages of poverty are not only linked to students at-risk of failure, but also to teachers at-risk of failure as well as measured by the disparities that were indicated in the schools' professional culture and teachers' self-efficacy beliefs in the highest and lowest performing schools; 2) school improvements should begin with fundamental changes to the quality of the schools' professional culture and should include an examination of the strength of teachers' personal self-efficacy beliefs and the

sources that alleviate threats to as well as strengthen those beliefs; 3) reforms that strengthen both the schools' professional culture and teachers' personal self-efficacy beliefs will provide both the quality looked for by educators and effectiveness sought through accountability systems; 4) principal and teacher preparation should include the acquisition of knowledge and practice in creating supportive professional environments; 5) essential knowledge for educational leaders involves an examine of the importance of the effects that teachers' personal self-efficacy beliefs and their linkage to school effectiveness; 6) additional studies are needed to continue explorations of teachers' collective self-efficacy and sources of self-efficacy (Olivier, 2001; Dellinger, 2001); 7) the findings in this study suggest school effectiveness to be an ongoing process and as such requires ongoing monitoring and professional growth.

Recommendations for Future Research

The findings and conclusions in this study suggest the need for a new line of theoretically-sound research studies that: 1) identify differences in the school organization and links to the schools' professional culture; 2) identify sources of teachers' self-efficacy beliefs and how to alleviate threats that jeopardize school effectiveness; and 3) develop a theory-based approach to new explorations of teacher involvement in decision-making.

Chapter Summary

Chapter Six provided a general overview of the study. A summary and discussion of the major findings and conclusion was presented. Discussion of various implications for theory, research, and practice, methodological and research design issues as well as suggestions for future research was included.

Dissertation Summary

This document described a study that examined teacher perceptions of the schools' professional culture, teachers' self-efficacy beliefs, and decision-making and sense of decision-making deprivation as mediators of school effectiveness. A theoretically grounded and research-based conceptual framework was developed to guide the study that examined schools as dynamic social systems, change as an ongoing process, teacher personal (teachers' self-efficacy beliefs) and school contextual (school culture and involvement in decision making) variables as mediators of school effectiveness. The study was a three-phased project representing the development of new measure and both quantitative and qualitative explorations related to differences in school effectiveness.

The purpose of the study was fourfold. First, the development of a viable conceptual framework was provided to guide the study and reflects multifaceted aspects of the schools' social organization that are defined by the study variables. A number of independent studies and theoretically posed phenomenon were integrated into a single conception that portray schools as complex organizations influenced by dynamic social systems that are vulnerable to external sources of support and/or neglect (Getzels & Guba, 1957; Getzels, Lipham, & Campbell, 1968). In this conception, change was viewed as an ongoing nonlinear process of a school "system in action" (Paul, 1977; Fullan, 1993; Getzels, Lipham, & Campbell, 1968, p. 151). This model helped guide the hypotheses and research questions used to explore the interdependent relationships and differences among elementary schools and linkages to school effectiveness. Second, refinements to a new measure of teacher self-efficacy beliefs grounded in self-efficacy theory and linked to effective teaching and learning were continued using the Teachers

Self-Efficacy Beliefs Scale-Short Form (TEBS-S) (Bobbett et al., 1999). The study established continuing reliability analysis and established criterion-related validity for TEBS-S as a multidimensional measure of effective teaching and learning activities that are linked to school effectiveness. Third, the study variables were used to explore relationships and explain the current condition of elementary schools using the conceptual framework. Fourth, the explorations of this study have helped augment the knowledge base in educational administration through explorations of the relationship between school culture, teacher self-efficacy beliefs, decision making, and their linkages to school effectiveness.

The ten independent variables in the study included: 1) three dimensions of the schools' professional culture: Shared Leadership, Professional Commitment, and Collegial Teaching and Learning; 2) four dimensions of teachers' personal self-efficacy beliefs: Classroom Management, Communication/Clarification, Accommodating Individual Differences, and instilling Higher Order Thinking Skills; and, 3) three dimensions of involvement in decision making: Core Technology, Operations and Management, and Work Setting/Context. The dependent variable in this study was the school performance index representing traditional indicators of school effectiveness measuring student achievement (NRT and CRT performance scores) and school holding power (attendance and retention indices).

Three primary measures were used for data collection: 1) the Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S) (Bobbett, et al., 2000); 2) the Teachers' Self-Efficacy Beliefs Scale-Short Form (TEBS-S), (Bobbett, et al., 2000); and 3) the Teacher Decision Making Scale (TDMS) (Alutto & Belasco, 1972; Bacharach,

1990). Additional data collection tools included 1) the focus group interview protocol (Bobbett, 2000); and 2) the Contextual Observation Checklist (Beaudoin, 1998).

The study used a mixed methods approach using a variety of research methods to analyze the data set. Numerous findings and conclusions are included in the study previous discussion those of most practical importance are delineated below:

1) The RSCEQ-S is a valid and reliable quantitative measure of school contextual variables that are empirically linked to traditional indicators of school effectiveness.
2) The TEBS-S is a valid and reliable quantitative measure of teacher personal variables that are empirically linked to school effectiveness.
3) The greatest predictor of school performance in this study was the schools' professional culture.
4) Decision-making is more directly correlated to the schools' professional culture than to traditional indicators of school effectiveness.
5) The qualitative component of this study provided a major theme that distinguished the lowest and highest performing schools in terms of disparities in the schools' professional culture and sources of information used by teachers that influence their self-efficacy beliefs.
6) A major implication for theory that was indicated from this study was that teachers' self-efficacy beliefs are a viable subtheory encompassed within the larger theory of schools as complex social systems.
7) A major implication for practice is the variety of new inexpensive strategies that can be used to meet the demands of accountability and improve the

quality of education using conceptions of the schools' professional culture and teachers' self-efficacy beliefs.

8) A major implication for research is the new line of inquiry that revives new interest in this country for school effectiveness research that includes better clarifications of the dynamic processes that influence the behaviors and beliefs of individuals in schools.

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APPENDIX A

COVER LETTERS, LETTERS OF PERMISSION, AND TEACHER CONSENT FORMS

Table A_1

Introductory Letter from State Superintendent of Education

April 15, 2000

TO: City/Parish Superintendents Selected to Participate

FROM: Cecil J. Picard
State Superintendent of Education

SUBJECT: School Culture Study

I am requesting your professional support for a study that examines school culture, teacher decision making, and teacher self-efficacy in Louisiana's elementary schools. Improving school performance is a priority in Louisiana. Information that helps administrators and teachers toward that end is essential.

Jackie Bobbett is an education program coordinator with the Louisiana Department of Education, as well as a doctoral student in the Louisiana State University's Educational Leadership, Research, and Counseling program. This spring, she is conducting research in the area of educational administration under the guidance of LSU professors. Many states are now recognizing the need for more information about the influences of school culture. Jackie's study will provide a school profile of important cultural dimensions that reflect everyday interactions in schools and support quality teaching and learning.

I encourage you to support this study and hope that if schools are selected from your district they will choose to be a part of this study. This is a professional opportunity to obtain valuable knowledge about school culture and school effectiveness in Louisiana. The study includes a survey for teachers that should require about 20 minutes to complete. A report of the study findings and implications for school improvement will be provided to each participating district. I believe the results of this study can help improve our understanding of how school performance is influenced by school culture, teacher beliefs, and the degree of teacher involvement in decision making.

If you can support Ms. Bobbett's study, please complete the enclosed form and fax or mail it to Jackie at the address shown.

I'll appreciate your professional support of this important study as we continue to work to improve Louisiana's schools.

CJP/jb

Table A_1 (Continued)

School Culture and School Effectiveness Study
Jacquline Bobbett, Louisiana State University Doctoral Dissertation Study

If schools are selected from my parish to participate in your study, I will help support your effort by encouraging principals to assist and teachers to complete the survey and potentially join in post survey discussion groups.

_____
City/Parish Superintendent

Return to

Jackie Bobbett
P.O. Box 94064-9064 Room 740a
Baton Rouge, Louisiana 70804
Ph: (225)342-3599
Fax (225) 342-3463

Table A_2

Notification Letter to School Principals

April 24, 2000

«PrinFirstName» «PrinLastName», «PrinTitle»
«School_Name», «School_District_Name»
«PrinAddress»
«PrinCity», Louisiana «PrinZipCode»

RE: Louisiana State University Doctoral Dissertation Study

Dear Principal «PrinLastName»:

Your school has been selected to be part of a dissertation study of Louisiana's elementary schools. The study examines the influences of school culture, teacher beliefs, and teacher involvement in decision making on school performance. «SupersTitle» «SupLastName» has agreed to support this study in order to improve our understanding about the influences on school performance.

Your professional support is needed in naming a contact person responsible for receiving, distributing, collecting, and returning the questionnaire from each teacher in your school. The questionnaire will have an envelope attached in which teachers are to place their responses, seal, and return to the contact person. The sealed envelopes should be returned using the postage paid return envelope provided. All teacher responses are due back within two weeks from the day they are distributed. A follow-up memo will be provided for the contact person to distribute reminding teachers after one week to return their completed questionnaire.

In addition to completing the questionnaire, teachers may be selected at random early next fall, to participate in an informal group discussion aimed at clarifying or enhancing significant aspects indicated by these measures. The survey takes approximately 20 minutes to complete.

It is believed that the information from this study will furnish school administrators with essential information for making school improvements. A summary of the study's findings and implications will be provided to each participating district.

Please indicate your permission to survey teachers and name the person designated to provide professional support using the attached form. Fax the completed form to me at (225) 342-3463. Your school will be contacted and further arrangements made to carry out this important task.

Your support and assistance are greatly appreciated. I look forward to working with you to help find ways to improve schools in Louisiana.

Sincerely,

Jackie Bobbett
Phone (225) 342-3599
Fax (225) 342-3463
Jbobbett@mail.doe.state.la.us

Table A_2 (Continued)

Jacquline Bobbett

Louisiana State University
Doctoral Dissertation Study

I will help support your effort by encouraging teachers to complete the survey and participate in group discussions, if selected, at the conclusion of this phase of the study.

Please contact _____ for further assistance at my school.
Name of School Contact

_____
Principal's Signature

Return to Jackie Bobbett
Fax: (225) 342-3463
Due by May 12, 2000

Table A_3

Letter to School Contact

April 29, 2000

RE: Louisiana State University Doctoral Dissertation Study

Contact Support Person for «School_Name»

I want to thank you in advance for supporting me in this study. The enclosed surveys are to be distributed to all teachers at your school.

The cover letter attached to the survey explains to teachers that they are to return the completed survey to you.

After one week, please post the enclosed flyer reminding teachers to return the teacher survey to you. Select a central location that teachers are sure to notice (e.g., near their mailboxes, lounge, or other location you deem appropriate). At the end of the second week, please return the surveys using the self-addressed, post-paid envelope enclosed.

I look forward to speaking with you in the future and thank you again for the extra effort to help me.

Table A_4

Letter to Teacher

Dear Teacher:

Your school has been selected to participate in an important doctoral dissertation study that examines your opinion about aspects related to your school's environment. Participation is voluntary, but your assistance is a necessary part of this study. The survey should take no longer than 20 minutes to complete, is divided into four parts and may be completed in the privacy of your own home.

Please complete the survey within two weeks, place it in the envelope attached, and then return the sealed envelope to the designated contact person for your school. By completing and returning the survey your consent to use the data for research purposes is implied. All responses will remain confidential. Place your completed questionnaire in the envelope attached and return it to the contact person giving it to you. Once completed the surveys will be returned in a postage-paid enveloped provided for the contact person. A summary of the study's findings will be provided to each participating district. Pending significant findings, you may be asked to volunteer later to share your related thoughts and opinions in an informal group discussion with other volunteer teachers in your school. These sessions will be tape-recorded and you may at any time during the course of this study discontinue your participation without consequence.

Your support and assistance are greatly appreciated. I look forward to working with you to help Louisiana find new approaches to school improvement.

If you have questions or concerns, feel free to contact me at any time.

Sincerely,

Jackie Bobbett
Phone (225) 342-3599
Fax (225) 342-3463
Jbobbett@mail.doe.state.la.us

Table A_5

Teacher Consent Letter

Dear Teacher:

You have been asked to volunteer to share your thoughts and opinions in an informal group discussion with other teachers in your school. These sessions will be tape-recorded and your may at anytime during the course of the study discontinue your participation without consequence.

Please return the signed agreement to me authorizing the information from the interview to be used for research purposes.

Sincerely,

Jackie Bobbett
Phone 225-342-3480
Fax 225-342-3463
Jbobbett@mail.doe.state.la.us

Teacher Consent Form

I agree to allow the information I share during the tape-recorded interview session to be utilized for research purposes.

_____
Teacher's Signature

APPENDIX B

INSTRUMENT SET, CONCEPTUAL DEFINITIONS, AND ITEM STATEMENTS FOR THE RSCEQ-S

Table B_1

Instrument Set Used for Data Collection: Revised School Cultural Elements Questionnaire Teacher Survey

NOTE: The original instrument packet was electronically scannable and printed on four, legal size pages.

Definition

This teacher survey asks you to make a series of judgments about your experience as a teaching professional. Teacher is defined as any full or part time faculty member having direct contact with students on a daily basis. Administrator is defined as any full or part time staff member responsible for providing conditions to help teachers carry out daily tasks.

PART I:

Directions

This questionnaire contains a number of statements about things which occur in some schools. After reading each of the statements carefully, you are asked to judge each response according to two criteria: (1) how you and your school actually are... and (2) how you would prefer that you or your school would be... You are to indicate the extent to which you agree or disagree with each of the statements. The actual scale applies to how YOU AND/OR YOUR SCHOOL ACTUALLY ARE and the prefer scale describes what you would PREFER TO BE OR WOULD PERFER YOUR SCHOOL TO BE LIKE. Fill in your response to each item using a number 2 pencil.

SD ...if you strongly disagree with the statement
D ...if you disagree with the statement
A ...if you agree with the statement
SA ...if you strongly agree with the statement

	Actual				Prefer			
	SD	D	A	SA	SD	D	A	SA
1) Administrators provide visible, ongoing support for new school programs and ideas								
2) Administrators are sympathetic with problems and difficulties encountered by teachers in their work								
3) Administrators work to ensure the cooperation of teachers								
4) Administrators visibly encourages teachers to be the best that they can be in the classroom.								
5) Teachers and administrators work cooperatively in developing new school programs and policies								
6) Teachers are willing to help each other when problems arise								
7) Teachers share classroom experiences with each other to improve their understanding of student learning.								
8) Teachers openly share problems with each other								
9) Teachers professionally share and learn from one another								

Table B_1 Continues

Table B_1 (Continued)

10) Teachers encourage each other to use professional judgment when making decisions. .....

11) Teachers give priority to helping their students develop higher order thinking skills .....

12) Teachers incorporate the findings of educational research into their own teaching and learning practices.....

13) Teachers believe that all students can learn .....

14) Teachers are committed to professional growth to improve teaching and learning .....

15) Teachers adequately plan teaching and learning activities to accommodate individual differences among students.....

16) The school administration encourages teachers and others to provide leadership for new school projects .....

17) Leadership roles are equally shared by teachers and administrators.....

18) Teachers feel comfortable in providing suggestions to colleagues about ways in which to improve teaching and learning.....

19) Teachers spend time together to informally discuss ways to improve the school.....

20) Teachers spend time in professional reflection about their work.....

Table B_2

Conceptual Definitions of the RSCEQ-S

Revised School Culture Elements Questionnaire-Short Form

Shared Leadership is defined as an ongoing process to accomplish school goals that reflect interpersonal roles and relationships among organizational members grounded in norms, values, and beliefs reflecting cooperation, sharing, support, and encouragement in work tasks and sensitivity to the problems and difficulties expressed by colleagues.

Collegial Teaching and Learning is defined as a dynamic process of continual growth through which teachers prioritize the need for ongoing learning as an organizational member for the purpose of enhancing teaching and learning. Collaborative efforts are exercised in order to personally and collectively benefit all students and staff. Some examples of collegial teaching and learning include: collaborative work, shared planning, personal and group reflection, dialogues among teachers, and the incorporation of educational research.

Professional Commitment refers to shared values among teachers that reflect the extent to which learning is pursued and applied as a way of life. Professional effectiveness is enhanced through teachers' commitment to improvement of the learning process and commitment as sources of help and support for colleagues within the organization.

Table B_3

Item Statements of the RSCEQ-S

Revised School Culture Elements

Actual: *How you and your school actually are...*
Preferred: *How you prefer things to be...*

Shared Leadership

Administrators provide visible, ongoing support for new school programs and ideas
Administrators are sympathetic with problems and difficulties encountered by teachers in their work
Administrators work to ensure the cooperation of teachers
Administrators visibly encourage teachers to be the best that they can be in the classroom.
Teachers and administrators work cooperatively in developing new school programs and policies
Teachers receive the assistance they need from administrators and colleagues to enhance the quality of teaching and learning in their classrooms.
Leadership roles are equally shared by teachers and administrators

Professional Commitment

Teachers give priority to helping their students develop higher order thinking skills
Teachers incorporate the findings of educational research into their own teaching and learning practices
Teachers believe that all students can learn
Teachers are committed to professional growth to improve teaching and learning
Teachers encourage each other to use professional judgment when making decisions
Teachers adequately plan teaching and learning activities to accommodate individual differences among students.
Teachers spend time in professional reflection about their work

Collegial Teaching and Learning

Teachers are willing to help each other when problems arise
Teachers share classroom experiences with each other to improve their understanding of student learning
Teachers openly share problems with each other
Teachers professionally share and learn from one another
Teachers feel comfortable in providing suggestions to colleagues about ways in which to improve teaching and learning

APPENDIX C

INSTRUMENT SET, CONCEPTUAL DEFINITIONS, AND ITEM STATEMENTS FOR THE TEBS-S

Table C_1

Instrument Set Used for Data Collection: Teacher Efficacy Beliefs Scale-Short Form: Teacher Survey

NOTE: The original instrument packet was electronically scannable and printed on four, legal size pages.

PART II:

Directions

This part asks that you make judgments about the strength of your personal beliefs in your capabilities to organize and successfully carry out teaching tasks in your school. In assessing the strengths of your personal beliefs about each task, consider your abilities within the context of your current school. Consider job roles and responsibilities, available resources and support, current policies, help from colleagues and so on. For each item, use the scale provided below and circle one of the corresponding numbers that best reflects the strength of your personal beliefs about your capabilities to accomplish each teaching task.

STRENGTH OF BELIEFS SCALE

1= *Weak Beliefs* (WB) in my capabilities: 2= *Moderately Strong Beliefs* (MSB) in my capabilities
3= *Strong Beliefs* (SB) in my capabilities: 4= *Very Strong Beliefs* (VSB) in my capabilities:

The strength of my personal beliefs in my capabilities to	WB	MSB	SB	VSB
1. plan activities that accommodate the range of individual differences among students				
2. plan evaluation procedures that accommodate individual differences among students				
3. use allocated time for activities that maximize learning				
4. effectively manage routines and procedures for learning tasks				
5. clarify directions for learning routines				
6. maintain high levels of student engagement in learning tasks				
7. redirect students who are persistently off task				
8. maintain a classroom climate of courtesy and respect				
9. maintain classroom climate that is fair and impartial				
10. communicate to students the specific learning outcomes of the lesson				
11. communicate to students the purpose and/or importance of learning tasks.				
12. implement teaching methods at an appropriate pace to accommodate differences among students				

Table C_1 Continues

Table C_1 (Continued)

13. utilize teaching aids and learning materials that accommodate individual differences among students ...

14. provide students with opportunities to learn at more than one cognitive and/or performance level ..

15. communicate to students content knowledge that is accurate and logical ...

16. clarify student misunderstandings and difficulties in learning ...

17. provide students with specific feedback about their learning ...

18. provide students with suggestions for improving learning ...

19. actively involve students in developing concepts ...

20. solicit a variety of questions throughout the lesson that enable higher-order thinking ...

21. actively involve students in critical analysis and/or problem solving ...

22. monitor students' involvement during learning tasks ...

23. adjust teaching and learning activities as needed...

24. manage student discipline/behavior...

25. involve students in using higher-order thinking skills ...

26. motivate students to perform to their fullest potential ...

27. provide a learning environment that accommodates students with special needs ...

28. improve the academic performance of my students, including those with learning disabilities ..

29. provide a positive influence on the academic performance of my students...

30. maintain a classroom environment in which students work cooperatively ...

Table C_2

Conceptual Definitions of the TEBS-S

Teacher Efficacy Beliefs Scale-Short Form

TEBS-S Classroom Management focuses on maintaining a classroom environment that maximizes learning through high levels of student engagement in learning tasks for all students.

TEBS-S Communicating/Clarifying focuses on the ability maximize learning through clear directions and attentiveness to student misunderstanding. Specific feedback is provided that clarifies the goals of learning tasks. Content knowledge is accurate and logical.

TEBS-S Accommodation of Individual Differences (AID) includes planning, implementation, and evaluation of learning opportunities and activities that accommodate individual differences among students.

TEBS-S Higher Order Thinking Skills (HOTS) focus on the active involvement of students in the development of higher order thinking skills such as critical analysis, problem solving, and concept development.

Table C_3

Item Statements of the TEBS-S

Teacher Efficacy Beliefs

In my present teaching situation, the strength of my personal beliefs in my capabilities to...

Classroom Management

effectively manage routines and procedures for learning tasks
redirect students who are persistently off task
maintain a classroom climate of courtesy and respect
maintain classroom climate that is fair and impartial
manage student discipline/behavior
maintain a classroom environment in which students work cooperatively

Communicate/Clarify

clarify directions for learning routines
communicate to students the specific learning outcomes of the lesson
communicate to students the purpose and/or importance of learning tasks.
communicate to students content knowledge that is accurate and logical
clarify student misunderstandings and difficulties in learning
provide students with specific feedback about their learning

Plan/Accommodate Individual Differences

plan activities that accommodate the range of individual differences among students
plan evaluation procedures that accommodate individual differences among students
implement teaching methods at an appropriate pace to accommodate differences among students
utilize teaching aids and learning materials that accommodate individual differences among students
provide a learning environment that accommodates students with special needs
improve the academic performance of my students, including those with learning disabilities

Instill Higher Order Thinking Skills

actively involve students in developing concepts
solicit a variety of questions throughout the lesson that enable higher-order thinking
actively involve students in critical analysis and/or problem solving
involve students in using higher-order thinking skills

APPENDIX D

INSTRUMENT SET, CONCEPTUAL DEFINITIONS, AND ITEM STATEMENTS FOR THE TDMS

Table D_1

Instrument Set Used for Data Collection: Teacher Decision Making Scale: Teacher (Actual and Preferred) Survey

NOTE: The original instrument packet was electronically scannable and printed on four, legal size pages.

PART III:

Directions

For this part, read the numbered item and darken the space below that best indicates your agreement with each item. Make two responses for each item: one for how often YOU have the opportunity to participate in decision making and one for how often you SHOULD have that opportunity to participate in decision making.

	Seldom or Never =1	Occa-sionally=2	Always or Often=3	Almost Always =4
	HAVE OPPORTUNITY		SHOULD HAVE OPPORTUNITY	
	1	2	3	4
1. The school to which you are assigned	1	2	3	4
2. The subject(s) or grade levels you are assigned to teach	1	2	3	4
3. Assignment of students to your class (es)	1	2	3	4
4. Removing students from your classroom for special instruction and assistance	1	2	3	4
5. Designing or planning the use of facilities	1	2	3	4
6. Budget development	1	2	3	4
7. Expenditure priorities	1	2	3	4
8. Staff hiring	1	2	3	4
9. Evaluation of your performance	1	2	3	4
10. Student discipline codes	1	2	3	4
11. Standardized testing policy	1	2	3	4
12. Grading policy	1	2	3	4
13. Procedures for reporting student achievement progress to parents	1	2	3	4
14. Student rights	1	2	3	4
15. What to teach	1	2	3	4

Table D_1 Continues

Table D_1 (Continued)

16. How to teach .....

17. The textbooks and workbooks
that will be available for use.....

18. The specific textbooks and workbooks
that you will use in your class(es) .....

19. Staff development opportunities offered
by your school/school district.....

Table D_2

Conceptual Definitions of the TDMS

Core Technology. Decisions that directly affect the teacher's effectiveness to improve classroom practices were used to describe the *core technology*. How often teachers actually participate in decisions that ultimately affect classroom practice was used to reflect the level of cultural support for the development of the teachers' professional capacity. Examples of decisions that represent teacher involvement in the core technology included such things as evaluation of teacher performance, reporting progress, what to teach, how to teach, what materials to use, and staff development opportunities.

Operations/Maintenance. Decisions that provided teachers with opportunities to collaborate with others about how to bring about goals were described as *operations and maintenance*. How often teachers helped facilitate decisions about spending priorities, strategies sessions for goal attainment, or effective class scheduling was used to gauge the depth of teacher involvement beyond the classroom. Examples of decisions presented to teachers included: the uses of facilities, budget development, expenditure priorities, staff hiring, and testing policies.

Work Setting/Context. Decisions about how to effectively reassign staff involve the use of the teachers as professionals in developing strategies that affect school productivity, as well as school holding power. This dimension was used to determine the level to which teachers perceived themselves as disconnected from decisions that target overall school improvement. Examples of decisions reflecting the *work setting/context* for teaching and learning included: school assignments, subject or grade levels taught, and students that were assigned to teachers.

Table D_3

Item Statements of the TDMS

Teacher Decision Making Scale

Actual: *How often YOU have the opportunity to participate in...*
Preferred: *How often YOU SHOULD HAVE the opportunity to participate in...*

Core Technology

Evaluation of your performance
Procedures for reporting student achievement progress to parents
Student rights
What to teach
How to teach
The textbooks and workbooks that will be available for use
The specific textbooks and workbooks that you will use in your class(es)
Staff development opportunities offered by your school/school district

Operations/Management

Designing or planning the use of facilities
Budget development
Expenditure priorities
Staff hiring
Standardized testing policy

Work Setting/Context

The school to which you are assigned
The subject(s) or grade levels you are assigned to teach
Assignment of students to your class (es)

APPENDIX E

INTRODUCTORY LETTER, FOCUS GROUP PROTOCOL, AND OBSERVATIONAL CHECKLIST

Table E_1

Focus Group Protocol:Introductory Letter

Focus Group Protocol

Teacher Focus Group Protocol
Louisiana State University, Dissertation Research Study

Group Number _____

This focus group meeting today is the second half of a dissertation study in which teachers at your school participated last spring.

I am conducting this focus group meeting with you to get your perspectives and beliefs about the points that will be covered.

The feedback from this focus group is essential to the study because of the importance your insights have on understanding circumstances that can be related to student and thus, school performance.

I will be tape recording this session, mainly because I cannot write down all your comments at once. If at any time you want me to turn off the recorder, I will.

In order to encourage each of you to speak openly, you do not have to address one another by name. I also want to encourage all of you to please share differing perspectives, if you have them. If you fail to do so, then your point of view (and others like you) will be underrepresented in the results of this part of the overall study.

I would like to begin this session by asking you to share your perspectives and opinion related to the following topics:

Table E_2

Focus Group Protocol: Interview Guide

Revised School Culture Elements (professional)

I. Shared Leadership

Do you know your school's performance score and whether you met the growth target this year? (Provide this information to teachers)

In light of the state's accountability movement this past year and the recent implementation of high stakes testing...

Do you think that these statewide efforts to improve schools have affected the degree to which administrators have made changes that have helped you improve your ability to teach?

II. Professional Commitment

I am going to read a statement to you, then want you to answer the question that follows.

"A teacher's commitment to improve the learning process and their commitment to serve as a source of help and support for colleagues within the organization is thought to improve professional effectiveness."

What barriers do you face in your attempts to improve the learning process and professional effectiveness of your school?

III. Collegial Teaching and Learning

What are some of the activities that you have found most enhance your own professional development?

Realistically, do you think these activities have had any impact on how your school is performing?

Teacher Self-Efficacy Beliefs Scale

I. Classroom Management

As you go about ensuring that students stay actively engaged in learning, do you find yourself feeling pressured to make a significant impact on the school's overall performance?

Table E_2 Continues

Table E_2 (Continued)

II. Communication/Clarification (C/C)

Teachers typically use both informal and formal assessments to determine what pupils know and are able to do.

What measures do you take to keep students on task?

III. Accommodating Individual Differences (AID)

What are some of the ways you address and or accommodate individual learning differences in your classroom?

Where did you learn these approaches (to redirect and other approaches mentioned to address individual learning differences)?

IV. Higher Order Thinking Skills (HOTS)

Student assessments typically attempt to capture student mastery in terms of skills and abilities demonstrated. These skills and abilities include assessing the student's ability to process multiple pieces of information, then make inferences, and draw accurate conclusions (i.e., assessing higher order thinking skills).

How does labeling the school affect your personal beliefs in your ability to train every student to think on a higher level?

What about content area, coursework? Do you think it effects your ability to teach facts and procedures...i.e., subject content.

Decision Making

What kinds of decisions do teachers make at this school, and how involved are you?

Do you feel that you are too involved in certain kinds of decision making?

Table E_3

Contextual Observation Checklist

SCHOOL ANALYSIS MODEL
Contextual Observation Checklist

Observer Code:_____ Site:_____

Part I: Faculty

- ❑ 1. Most faculty members arrive on campus before the prescribed time.
- ❑ 2. Most faculty members arrive on campus at the prescribed time.
- ❑ 3. Most faculty members arrive on campus after the prescribed time.

- ❑ 1. Teacher breaks are < 30 minutes in duration.
- ❑ 2. Teacher breaks are 30< X < 60 minutes in duration.
- ❑ 3. Teacher breaks are > 60 minutes in duration.

- ❑ 1. Most faculty members take their breaks in the faculty lounge.
- ❑ 2. Some faculty members take their breaks in the faculty lounge.
- ❑ 3. Few faculty members take their breaks in the faculty lounge.

- ❑ 1. Most conversations in the faculty lounge involve school issues.
- ❑ 2. Some conversations in the faculty lounge involve school issues.
- ❑ 3. Few conversations in the faculty lounge involve school issues.

- ❑ 1. Most faculty members express satisfaction with their job.
- ❑ 2. Some faculty members express satisfaction with their job.
- ❑ 3. Few faculty members express satisfaction with their job.

- ❑ 1. The principal is often seen throughout the campus.
- ❑ 2. The principal is at times seen throughout the campus.
- ❑ 3. The principal is rarely seen throughout the campus.

- ❑ 1. Students often talk informally with the principal.
- ❑ 2. Students at times talk informally with the principal.
- ❑ 3. Students rarely talk informally with the principal.

- ❑ 1. Faculty members often talk informally with the principal.
- ❑ 2. Faculty members at times talk informally with the principal.
- ❑ 3. Faculty members rarely talk informally with the principal.

Part II: Campus Behavior

- ❑ 1. Most students arrive on campus before the prescribed time.
- ❑ 2. Most students arrive on campus at the prescribed time.
- ❑ 3. Most students arrive on campus after the prescribed time.

Table E_3 Continues

Table E_3 (Continued)

- ❑ 1. Many students can be seen loitering on campus during the academic day.
- ❑ 2. Some students can be seen loitering on campus during the academic day.
- ❑ 3. Few students can be seen loitering on campus during the academic day.

- ❑ 1. Most duty teachers are in place prior to students' arriving on campus.
- ❑ 2. Some duty teachers are in place prior to students' arriving on campus.
- ❑ 3. Few duty teachers are in place prior to students' arriving on campus.

- ❑ 1. Most students move to their designated areas in an orderly manner.
- ❑ 2. Some students move to their designated areas in an orderly manner.
- ❑ 3. Few students move to their designated areas in an orderly manner.

- ❑ 1. Most students follow the directions of the duty teachers.
- ❑ 2. Some students follow the directions of the duty teachers.
- ❑ 3. Few students follow the directions of the duty teachers.

Part III: Hallways & Playground/Commons Area

- ❑ 1. Most duty teachers for the playground/commons area actively monitor students.
- ❑ 2. Some duty teachers for the playground/commons area actively monitor students.
- ❑ 3. Few duty teachers for the playground/commons area actively monitor students.

- ❑ 1. Most hallway duty teachers actively monitor students.
- ❑ 2. Some hallway duty teachers actively monitor students.
- ❑ 3. Few hallway duty teachers actively monitor students.

- ❑ 1. Most playground equipment is in good condition.
- ❑ 2. Some playground equipment is in good condition.
- ❑ 3. No playground equipment is in good condition.

- ❑ 1. Most students respond to the end of recess without additional prompts.
- ❑ 2. Some students respond to the end of recess without additional prompts.
- ❑ 3. Few students respond to the end of recess without additional prompts.

- ❑ 1. Most hallways are clean and free of debris.
- ❑ 2. Some hallways are clean and free of debris.
- ❑ 3. Few hallways are clean and free of debris.

- ❑ 1. Most hallways have bulletin boards with academic and/or behavioral themes.
- ❑ 2. Some hallways have bulletin boards with academic and/or behavioral themes.
- ❑ 3. Few hallways have bulletin boards with academic and/or behavioral themes.

- ❑ 1. Most bulletin board items have been commercially purchased.
- ❑ 2. Some bulletin board items have been commercially purchased.
- ❑ 3. Few bulletin board items have been commercially purchased.

Table E_3 Continues

Table E_3 (Continued)

Part IV: Custodian

- ❑ 1. Most areas of the campus are clean.
- ❑ 2. Some areas of the campus are clean.
- ❑ 3. Few areas of the campus are clean.

- ❑ 1. Most hallways of the campus are clean.
- ❑ 2. Some hallways of the campus are clean.
- ❑ 3. Few hallways of the campus are clean.

- ❑ 1. Most bathrooms of the campus are clean.
- ❑ 2. Some bathrooms of the campus are clean.
- ❑ 3. Few bathrooms of the campus are clean.

- ❑ 1. Most of the buildings on campus need major repairs.
- ❑ 2. Some of the buildings on campus need major repairs.
- ❑ 3. None of the buildings on campus need major repairs.

- ❑ 1. Students often talk informally with the custodial staff.
- ❑ 2. Students at time talk informally with the custodial staff.
- ❑ 3. Students rarely talk informally with the custodial staff.

- ❑ 1. Most faculty members have a positive attitude toward the custodians.
- ❑ 2. Some faculty members have a positive attitude toward the custodians.
- ❑ 3. Few faculty members have a positive attitude toward the custodians.

- ❑ 1. Most of the equipment on campus is operational.
- ❑ 2. Some of the equipment on campus is operational.
- ❑ 3. Almost no equipment on campus is operational.

Part V: Cafeteria

- ❑ 1. Students often talk informally with the cafeteria staff.
- ❑ 2. Students at times talk informally with the cafeteria staff.
- ❑ 3. Students rarely talk informally with the cafeteria staff.

- ❑ 1. Most students complain about the food to the cafeteria staff.
- ❑ 2. Some students complain about the food to the cafeteria staff.
- ❑ 3. Few students complain about the food to the cafeteria staff.

- ❑ 1. Most areas of the cafeteria are clean.
- ❑ 2. Some areas of the cafeteria are clean.
- ❑ 3. Few areas of the cafeteria are clean.

- ❑ 1. Most teachers eat with their students.
- ❑ 2. Some teachers eat with their students.
- ❑ 3. Few teachers eat with their students.

Table E_3 Continues

Table E_3 (Continued)

- ❑ 1. Most students move throughout the cafeteria in an orderly manner.
- ❑ 2. Some students move throughout the cafeteria in an orderly manner.
- ❑ 3. Few students move throughout the cafeteria in an orderly manner.

- ❑ 1. Most students in the cafeteria follow the directions of the duty teacher.
- ❑ 2. Some students in the cafeteria follow the directions of the duty teacher.
- ❑ 3. Few students in the cafeteria follow the directions of the duty teacher.

Part VI: Library & Computer Lab

- ❑ 1. Most students appear to enjoy spending time in the library.
- ❑ 2. Some students appear to enjoy spending time in the library.
- ❑ 3. Few students appear to enjoy spending time in the library.

- ❑ 1. Most students appear to enjoy spending time in the computer lab.
- ❑ 2. Some students appear to enjoy spending time in the computer lab.
- ❑ 3. Few students appear to enjoy spending time in the computer lab.

- ❑ 1. Most of the books in the library are in good condition.
- ❑ 2. Some of the books in the library are in good condition.
- ❑ 3. Few of the books in the library are in good condition.

- ❑ 1. Most students follow the directions of the librarian.
- ❑ 2. Some students follow the directions of the librarian.
- ❑ 3. Few students follow the directions of the librarian.

- ❑ 1. Most students follow the directions of the computer lab teachers.
- ❑ 2. Some students follow the directions of the computer lab teachers.
- ❑ 3. Few students follow the directions of the computer lab teachers.

- ❑ 1. Most students are respectful and careful with computer equipment.
- ❑ 2. Some students are respectful and careful with computer equipment.
- ❑ 3. Few students are respectful and careful with computer equipment.

- ❑ 1. Most of the furniture in the library is in good condition.
- ❑ 2. Some of the furniture in the library is in good condition.
- ❑ 3. Little of the furniture in the library is in good condition.

- ❑ 1. Most equipment in the computer lab is less than five years old.
- ❑ 2. Some equipment in the computer lab is less than five years old.
- ❑ 3. Little equipment in the computer lab is less than five years old.

Table E_3 Continues

Table E_3 (Continued)

Part VII: Auxiliary Classes

- ❑ 1. Most students receive music instruction from a certified music teacher.
- ❑ 2. Some students receive music instruction from a certified music teacher.
- ❑ 3. Few or no students receive music instruction from a certified music teacher.

- ❑ 1. Most equipment used in music class is in good condition.
- ❑ 2. Some equipment used in music class is in good condition.
- ❑ 3. Little equipment used in music class is in good condition.

- ❑ 1. Most students receive P. E. instruction from a certified P. E. teacher.
- ❑ 2. Some students receive P. E. instruction from a certified P. E. teacher.
- ❑ 3. Few or no students receive P. E. instruction from a certified P. E. teacher.

- ❑ 1. Most equipment used in P. E. class is in good condition.
- ❑ 2. Some equipment used in P. E. class is in good condition.
- ❑ 3. Little equipment used in P. E. class is in good condition.

- ❑ 1. Most students receive art instruction from a certified art teacher.
- ❑ 2. Some students receive art instruction from a certified art teacher.
- ❑ 3. Few or no students receive art instruction from a certified art teacher.

- ❑ 1. Most equipment used in art instruction is in good condition.
- ❑ 2. Some equipment used in art instruction is in good condition.
- ❑ 3. Little equipment used in art instruction is in good condition.

APPENDIX F

SUPPLEMENTAL DESCRIPTIVE STATISTICS FOR EACH ITEM ON THE RSCEQ-S, TEBS-S, AND TDMS, ITEM LOCATION TABLE, AND SUPPLEMENTAL DESCRIPTIVE STATISTICS FOR GROUP ANALYSIS, AND SUMMARY OF DESCRIPTIVE STATISTICS FOR SAMPLE SCHOOLS

Table F_1

Summary of Descriptive Statistics for Each Item and Total Instrument for the RSCEQ-S Teachers Actual Perceptions for all Schools (n=555 teachers)

Item	M	SD	Minimum	Maximum	M%Max
RSCEQ (Teacher's Actual Perceptions)					
CA1	3.32	0.73	1.00	4.00	83.00
CA 2	3.35	0.69	1.00	4.00	83.75
CA 3	3.11	0.67	1.00	4.00	77.75
CA 4	3.07	0.84	1.00	4.00	76.75
CA 5	3.15	0.73	1.00	4.00	78.75
CA 6	3.01	0.67	1.00	4.00	75.25
CA 7	2.99	0.84	1.00	4.00	74.75
CA 8	3.06	0.78	1.00	4.00	76.50
CA 9	3.18	0.74	1.00	4.00	79.50
CA 10	3.34	0.76	1.00	4.00	83.50
CA 11	3.17	0.68	1.00	4.00	79.25
CA 12	3.20	0.65	1.00	4.00	80.00
CA 13	3.00	0.83	1.00	4.00	75.00
CA 14	3.09	0.69	1.00	4.00	77.25
CA 15	3.08	0.72	1.00	4.00	77.00
CA 16	2.99	0.79	1.00	4.00	74.75
CA 17	2.78	0.79	1.00	4.00	69.50
CA 18	2.79	0.74	1.00	4.00	69.75
CA 19	2.60	0.90	1.00	4.00	65.00
CA 20	2.80	0.85	1.00	4.00	70.00
TOTAL	61.8				
TOTAL %MAX [a]	77.3%				

Note: Means and SD with mean-substitution in place.
CA = Culture Actual Perceptions on the RSCEQ-S
[a] Total CA=RSCEQ-S actual score expressed as a percentage of maximum possible score.

Table F_2

Summary of Descriptive Statistics for Each Item and Total Instrument for the RSCEQ-S (Teacher's Preferred Perceptions) for all Schools (n=555 teachers)

Item	M	SD	Minimum	Maximum	M%Max
RSCEQ (Teacher's Preferred Perceptions)					
CP1	3.76	0.43	1.00	4.00	94.00
CP2	3.84	0.38	1.00	4.00	96.00
CP3	3.77	0.43	1.00	4.00	94.25
CP4	3.77	0.46	1.00	4.00	94.25
CP5	3.76	0.44	1.00	4.00	94.00
CP6	3.65	0.47	2.00	4.00	91.25
CP7	3.73	0.47	1.00	4.00	93.25
CP8	3.56	0.54	1.00	4.00	89.00
CP9	3.78	0.44	1.00	4.00	94.50
CP10	3.80	0.41	1.00	4.00	95.00
CP11	3.75	0.45	1.00	4.00	93.75
CP12	3.77	0.41	2.00	4.00	94.25
CP13	3.70	0.47	1.00	4.00	92.50
CP14	3.69	0.46	1.00	4.00	92.25
CP15	3.75	0.44	1.00	4.00	93.75
CP16	3.76	0.43	1.00	4.00	94.00
CP17	3.59	0.54	1.00	4.00	89.75
CP18	3.55	0.54	1.00	4.00	88.75
CP19	3.54	0.58	1.00	4.00	88.50
CP20	3.57	0.55	1.00	4.00	89.25
TOTAL	74.1				
TOTAL %MAX [a]	92.6%				

Note: Means and SD with mean-substitution in place
CP = Culture Preferred Perceptions on the RSCEQ-S
[a] Total RSCEQ preferred score expressed as a percentage of maximum possible score

Table F_3

Summary of Descriptive Statistics for Each Item and Total Instrument for the TEBS-S for all Schools (n=555 teachers)

Item	M	SD	Minimum	Maximum	M%Max
TEBS-S 1	3.20	0.68	1.00	4.00	80.00
TEBS-S 2	3.10	0.71	1.00	4.00	77.50
TEBS-S 3	3.32	0.67	1.00	4.00	83.00
TEBS-S 4	3.39	0.67	1.00	4.00	84.75
TEBS-S 5	3.51	0.61	1.00	4.00	87.75
TEBS-S 6	3.36	0.63	1.00	4.00	84.00
TEBS-S 7	3.48	0.62	1.00	4.00	87.00
TEBS-S 8	3.58	0.63	1.00	4.00	89.50
TEBS-S 9	3.62	0.59	1.00	4.00	90.50
TEBS-S 10	3.44	0.62	1.00	4.00	86.00
TEBS-S 11	3.51	0.62	1.00	4.00	87.75
TEBS-S 12	3.32	0.66	1.00	4.00	83.00
TEBS-S 13	3.34	0.68	1.00	4.00	83.50
TEBS-S 14	3.38	0.63	1.00	4.00	84.50
TEBS-S 15	3.53	0.57	1.00	4.00	88.25
TEBS-S 16	3.46	0.60	1.00	4.00	86.50
TEBS-S 17	3.48	0.60	1.00	4.00	87.00
TEBS-S 18	3.43	0.64	1.00	4.00	85.75
TEBS-S 19	3.22	0.71	1.00	4.00	80.50
TEBS-S 20	3.34	0.68	1.00	4.00	83.50
TEBS-S 21	3.25	0.68	1.00	4.00	81.25
TEBS-S 22	3.54	0.55	1.00	4.00	88.50
TEBS-S 23	3.54	0.58	1.00	4.00	88.50
TEBS-S 24	3.50	0.71	1.00	4.00	87.50
TEBS-S 25	3.29	0.71	1.00	4.00	82.25
TEBS-S 26	3.48	0.65	1.00	4.00	87.00
TEBS-S 27	3.31	0.68	1.00	4.00	82.75
TEBS-S 28	3.35	0.66	1.00	4.00	83.75
TEBS-S 29	3.58	0.58	1.00	4.00	89.50
TEBS-S 30	3.47	0.66	1.00	4.00	86.75
TOTAL	98.9				
TOTAL %MAX [a]	82.4%				

Note: Means and SD with mean-substitution in place
TEBS-S = Teacher Self-Efficacy Beliefs Scale-Short Form
[a] Total TEBS score expressed as a percentage of maximum possible score

Table F_4

Summary of Descriptive Statistics for Each Item and Total Instrument for the TDMS (Have Opportunity) for all Schools (n=555 teachers)

Item	M	SD	Minimum	Maximum	M%Max
Decision Making (Actual)					
TDM1	2.83	1.04	1.00	4.00	70.75
TDM2	3.04	1.00	1.00	4.00	76.00
TDM3	1.82	1.01	1.00	4.00	45.50
TDM4	2.48	1.00	1.00	4.00	62.00
TDM5	1.93	0.99	1.00	4.00	35.75
TDM6	1.47	0.80	1.00	4.00	36.75
TDM7	1.61	0.83	1.00	4.00	40.25
TDM8	1.38	0.75	1.00	4.00	34.50
TDM9	2.91	1.01	1.00	4.00	72.75
TDM10	2.50	1.04	1.00	4.00	62.50
TDM11	1.51	0.89	1.00	4.00	37.75
TDM12	1.84	1.05	1.00	4.00	46.00
TDM13	2.93	1.06	1.00	4.00	73.25
TDM14	2.29	1.05	1.00	4.00	57.25
TDM15	2.66	1.06	1.00	4.00	66.50
TDM16	3.24	0.90	1.00	4.00	81.00
TDM17	2.31	0.99	1.00	4.00	57.75
TDM18	2.34	0.99	1.00	4.00	58.50
TDM19	2.59	1.02	1.00	4.00	64.75
TOTAL	43.7				
TOTAL %MAX [a]	57.5%				

Note: Means and SD with mean-substitution in place
TDM = Teacher Decision Making (Have Opportunity)
[a] Total RSCEQ score expressed as a percentage of maximum possible score

Table F_5

Summary of Descriptive Statistics for Each Item and Total Instrument for the TDMS (Should Have Opportunity) for all Schools (n=555 teachers)

Item	M	SD	Minimum	Maximum	M%Max
Decision Making (Should Have Opportunity)					
TDMP1	3.45	0.69	1.00	4.00	86.25
TDMP2	3.60	0.62	1.00	4.00	90.00
TDMP3	2.73	0.89	1.00	4.00	68.25
TDMP4	3.21	0.77	1.00	4.00	80.25
TDMP5	2.84	0.80	1.00	4.00	71.00
TDMP6	2.46	0.90	1.00	4.00	61.50
TDMP7	2.53	0.86	1.00	4.00	61.50
TDMP8	2.09	0.96	1.00	4.00	52.25
TDMP9	3.33	0.75	1.00	4.00	83.25
TDMP10	3.27	0.74	1.00	4.00	81.75
TDMP11	2.85	0.95	1.00	4.00	71.25
TDMP12	2.94	0.93	1.00	4.00	73.50
TDMP13	3.42	0.72	1.00	4.00	85.50
TDMP14	3.08	0.78	1.00	4.00	77.00
TDMP15	3.41	0.69	1.00	4.00	85.25
TDMP16	3.62	0.62	1.00	4.00	90.50
TDMP17	3.39	0.71	1.00	4.00	84.75
TDMP18	3.41	0.68	1.00	4.00	85.25
TDMP19	3.32	0.76	1.00	4.00	83.00
TOTAL	58.9				
TOTAL %MAX [a]	77.6%				

Note: Means and SD with mean-substitution in place
TDMP = Teacher Decision-Making Preferred (Should Have Opportunity)
[a] Total RSCEQ score expressed as a percentage of maximum possible score

Table F_6

Item Location for the Three-Factor Solution of the RSCEQ-S, Four-Factor Solution of the TEBS-S, and Three-Factor Solution of the TDMS

	Factor	Item Number
RSCEQ-S (19)[a]		
1)	Shared Leadership (7)	1,4,7,10,13,16,19
2)	Professional Commitment (7)	3,6,9,12,14,15,18
3)	Collegial Teaching and Learning (5)	2,5,8,11,17
TEBS-S (22)		
1)	Classroom Management(6)	4,7,8,9,24,30
2)	Communication/Clarification (6)	5,10,11,15,16,17
3)	Accommodating Individual Differences (6)	1,2,12,13,27,28
4)	Instilling Higher Order Thinking Skills (4)	19,20,21,25
TDMS (16)		
1)	Core Technology (8)	9,13,14,15,16,17,18,19
2)	Operations/Management (5)	5,6,7,8,11
3)	Work Setting/Context (3)	1,2,3

[a] Number of items per factor

Table F_7

Summary of Instrument Subscale Descriptive Statistics for the Revised School Culture Elements Questionnaire (RSEQ-S), Teacher Efficacy Beliefs Scale (TEBS-S), and Teacher Decision Making Scales (TDMS) by Group Level (n=12 schools)

Measure/Subscale	M	SD	M%Max [a]
	Group 1		
RSCEQ (19) [b]			
Subscales			
Shared Leadership (7) [c]	21.33	4.84	76.25%
Professional Commitment (7)	21.61	3.65	77.18%
Collegial Teaching and Learning (5)	15.23	2.99	76.15%
TEBS (22)			
Subscales			
Classroom Mgt. (6)	21.11	2.86	87.96%
Communicate/Clarify (6)	21.14	2.78	88.08%
Plan/Accommodate Individual Differences (6)	19.89	3.06	82.84%
Instill Higher Order Thinking Skills (4)	13.32	2.27	83.25%
TDMS (16)			
Subscales			
Core Technology (5)	20.81	5.51	65.03%
Operations/Management (8)	7.84	3.25	39.20%
Work Setting/Context (3)	7.78	2.35	64.83%

[a] Subscale mean score expressed as a percentage of the maximum possible score
[b] Total number of items on the instrument
[c] Number of items on the subscale

Table F_8

Summary of Instrument Subscale Descriptive Statistics for the Revised School Culture Elements Questionnaire (RSEQ-S), Teacher Efficacy Beliefs Scale (TEBS-S), and Teacher Decision Making Scales (TDMS) by Group Level (n=3 schools)

Measure/Subscale	M	SD	M%Max [a]
	Group 2		
RSCEQ (19) [b]			
Subscales			
Shared Leadership (7) [c]	22.85	3.99	81.61%
Professional Commitment (7)	23.10	2.82	82.50%
Collegial Teaching and Learning (5)	16.18	2.41	80.85%
TEBS (22)			
Subscales			
Classroom Mgt. (6)	21.90	3.02	91.25%
Communicate/Clarify (6)	21.82	2.93	90.92%
Accommodating Individual Differences (6)	19.81	3.69	82.54%
Instilling Higher Order Thinking Skills (4)	13.88	2.09	86.75%
TDMS (16)			
Subscales			
Core Technology (8)	22.44	5.03	70.13%
Operations/Mgt (5)	7.45	2.57	49.67%
Work Setting/Context (3)	7.80	2.23	65.00%

[a] Subscale mean score expressed as a percentage of the maximum possible score
[b] Total number of items on the instrument
[c] Number of items on the subscale

Table F_9

Summary of Instrument Subscale Descriptive Statistics for the Revised School Culture Elements Questionnaire (RSEQ-S), Teacher Efficacy Beliefs Scale (TEBS-S), and Teacher Decision Making Scales (TDMS) by Group Level (n=7 schools)

Measure/Subscale	M	SD	M%Max [a]
	Group 3		
RSCEQ (19) [b]			
Subscales			
Shared Leadership (7) [c]	21.39	4.38	76.39%
Professional Commitment (7)	21.43	3.48	76.54%
Collegial Teaching and Learning (5)	16.00	2.50	80.00%
TEBS (22)			
Subscales			
Classroom Mgt. (6)	20.72	2.73	86.33%
Communicate/Clarify (6)	20.46	2.87	85.25%
Accommodating Individual Differences (6)	19.44	2.91	81.00%
Instilling Higher Order Thinking Skills (4)	12.54	2.38	78.38%
TDMS (16)			
Subscales			
Core Technologyl (8)	21.63	4.73	67.59%
Operations/Mgt. (5)	7.70	2.58	38.50%
Work Setting/Context (3)	7.63	2.34	63.58%

[a] Subscale mean score expressed as a percentage of the maximum possible score
[b] Total number of items on the instrument
[c] Number of items on the subscale

Table F_{10}

Summary of Instrument Subscale Descriptive Statistics for the Revised School Culture Elements Questionnaire (RSEQ-S), Teacher Efficacy Beliefs Scale (TEBS-S), and Teacher Decision Making Scales (TDMS) by Group Level (n=8 schools)

Measure/Subscale	M	SD	M%Max [a]
	Group 4		
RSCEQ (19) [b]			
Subscales			
Shared Leadership (7) [c]	20.18	4.59	72.07%
Professional Commitment (7)	20.58	3.75	73.50%
Collegial Teaching and Learning (5)	14.88	3.04	74.40%
TEBS (22)			
Subscales			
Classroom Mgt. (6)	20.87	2.74	86.96%
Communicate/Clarify (6)	20.68	2.69	86.17%
Accommodating Individual Differences (6)	19.65	3.03	81.83%
Instilling Higher Order Thinking Skills (4)	13.06	2.19	81.63%
TDMS (16)			
Subscales			
Core Technology (8)	20.97	5.72	65.53%
Operations/Mgt. (5)	8.66	3.82	43.30%
Work Setting/Context (3)	7.61	2.46	63.42%

[a] Subscale mean score expressed as a percentage of the maximum possible score
[b] Total number of items on the instrument
[c] Number of items on the subscale

Table F_{11}

Summary of Descriptive Statistics for Socioeconomic Status (SES) and School Performance Scores for All Schools (n=34 schools)

	School Name	SPS	%SES	%Min	%SpEd[a]
Group 1	A	64.1	97.6%	98.0%	11.9%
	B	99.3	96.7%	99.7%	5.6%
	C	57.1	96.3%	99.8%	11.0%
	D	69.8	95.6%	95.6%	11.0%
	E	77.3	94.0%	98.2%	10.8%
	F	69.7	93.6%	75.7%	15.0%
	G	83.7	93.1%	99.6%	4.5%
	H	70.9	92.3%	65.0%	9.4%
	I	73.8	92.0%	56.6%	11.9%
	J	78.3	90.0%	57.3%	9.0%
	K	58.9	88.8%	85.1%	9.1%
	L	72.4	87.9%	99.2%	8.8%
Group 2	A	117.8	8.6%	5.8%	28.0%
	B	101.6	19.0%	15.8%	10.6%
	C	124.7	22.4%	9.7%	21.8%
	D	130.8	35.3%	38.7%	2.9%
	E	91.2	36.5%	22.2%	14.2%
Group 3	A	85.6	35.9%	24.4%	10.7%
	B	82.7	36.8%	28.7%	14.0%
	C	84.0	41.1%	21.9%	14.8%
	D	75.4	42.4%	37.2%	12.4%
	E	65.4	47.2%	42.8%	9.6%
	F	82.9	47.9%	33.5%	25.4%
	G	62.6	49.1%	9.6%	15.7%
	H	71.2	51.3%	12.5%	15.7%
	I	82.3	51.8%	19.1%	4.0%
	J	79.3	51.9%	8.1%	18.6%
Group 4	A	50.5	88.6%	86.1%	19.9%
	B	37.9	89.6%	93.4%	20.0%
	C	46.5	93.9%	85.4%	13.6%
	D	32.2	94.3%	99.5%	6.9%
	E	54.3	95.6%	97.8%	12.1%
	F	24.7	91.0%	99.7%	5.6%
	G	44.5	97.6%	100.0%	9.4%

Note: Item in bold are deleted from analyses using school and group means

* Response rates > .40 retained

[a] includes gifted and talented as well as learning impaired.

Table F_{12}

Summary of Intercorrelation and Alpha Coefficients for Items/Subscales of the Revised School Culture Elements Questionnaire-Short Form (RSCEQ-S) *Teacher's Actual Perceptions* (n=555 teachers)

Subscale Items	Item Correlation With Total	Alpha if Item Deleted
RSCEQ-S/ Shared Leadership		
CA1	0.68	0.89
CA4	0.73	0.89
CA7	0.76	0.88
CA10	0.69	0.89
CA13	0.71	0.89
CA16	0.73	0.89
CA19	0.70	0.89
RSCEQ-S/ Professional Commitment		
CA3	0.61	0.83
CA6	0.60	0.83
CA9	0.60	0.84
CA12	0.65	0.83
CA14	0.63	0.83
CA15	0.68	0.82
CA18	0.55	0.84
RSCEQ-S/ Collegial Teaching and Learning		
CA2	0.57	0.79
CA5	0.69	0.76
CA8	0.58	0.79
CA11	0.67	0.77
CA17	0.55	0.80

Note: CA-Culture (Teacher Actual Perceptions)

Table F_{13}

Summary of Intercorrelation and Alpha Coefficients for Items/Subscales of the Teacher Self-Efficacy Beliefs Scale-Short Form (TEBS-S) (n=555 teachers)

Subscale Items	Item Correlation With Total	Alpha if Item Deleted
TEBS-S/ Classroom Management		
TEB-S5	0.62	0.85
TEB-S10	0.69	0.84
TEB-S11	0.66	0.84
TEB-S15	0.67	0.84
TEB-S16	0.71	0.83
TEB-S17	0.60	0.85
TEBS-S/ Communication/Clarification		
TEB-S4	0.59	0.83
TEB-S7	0.57	0.83
TEB-S8	0.71	0.81
TEB-S9	0.65	0.82
TEB-S24	0.63	0.82
TEB-S30	0.63	0.82
TEBS-S/ Accommodating Individual Learning Differences		
TEB-S1	0.68	0.83
TEB-S2	0.64	0.84
TEB-S12	0.64	0.84
TEB-S13	0.60	0.85
TEB-S27	0.69	0.83
TEB-S28	0.69	0.83
TEBS-S/ Instilling Higher Order Thinking Skills		
TEB-S19	0.58	0.86
TEB-S20	0.73	0.79
TEB-S21	0.74	0.79
TEB-S25	0.72	0.80

Table F_{14}

Summary of Intercorrelation and Alpha Coefficients for Items/Subscales of the Teacher Decision-Making Scale (TDMS) *Have Opportunity* (n=555 teachers)

Subscale Items	Item Correlation With Total	Alpha if Item Deleted
TDMS/ Core Technology		
TDMS9	0.38	0.80
TDMS13	0.50	0.79
TDMS14	0.57	0.77
TDMS15	0.55	0.78
TDMS16	0.45	0.79
TDMS17	0.58	0.77
TDMS18	0.58	0.77
TDMS19	0.53	0.78
TDMS/ Operations and Management		
TDMS5	0.50	0.77
TDMS6	0.69	0.70
TDMS7	0.69	0.70
TDMS8	0.53	0.76
TDMS11	0.44	0.78
TDMS/ Work Setting/Context		
TDMS1	0.50	0.49
TDMS2	0.55	0.43
TDMS3	0.34	0.70

TDMS= Teacher Decision-Making Scale *Have Opportunity*

APPENDIX G

TEACHER SELF-EFFICACY CAN, ABLE, AND BELIEFS FORMS 15-ITEM MEASURE AND TEACHER SELF-EFFICACY BELIEFS 51-ITEM MEASURE

Table G_1

Able, Belief and Can Forms

Teacher Questionnaire

We are requesting your assistance in developing a survey that measures teachers beliefs about their capabilities. There are two parts to this questionnaire, but it should take only about 10 minutes to complete. We appreciate your help and careful consideration of each individual response. Your response is completely confidential and you do not need to include your name.

In making your choice please consider whether you CAN do the following tasks.

TASK	1 Cannot Do at All	2	3	4	5	6	7	8	9	10 Can Definitely Do
1. I can manage discipline/behavior with all of my students.	1	2	3	4	5	6	7	8	9	10
2. I can successfully complete all teaching tasks within the current time constraints.	1	2	3	4	5	6	7	8	9	10
3. I can successfully teach my subject matter to all of my students.	1	2	3	4	5	6	7	8	9	10
4. I can relate well with the parents of my students.	1	2	3	4	5	6	7	8	9	10
5. I can involve all of my students in using higher order thinking skills.	1	2	3	4	5	6	7	8	9	10
6. I can prepare all of my students to be successful on state mandated assessment tests.	1	2	3	4	5	6	7	8	9	10
7. I can motivate all of my students to perform to their fullest potential.	1	2	3	4	5	6	7	8	9	10
8. I can provide a learning environment that accommodates students with special needs.	1	2	3	4	5	6	7	8	9	10
9. I can reach even the most difficult students.	1	2	3	4	5	6	7	8	9	10
10. I can improve the academic performance of any child, including those with learning disabilities.	1	2	3	4	5	6	7	8	9	10
11. I can work cooperatively with other teachers on day-to-day routine school tasks.	1	2	3	4	5	6	7	8	9	10
12. I can provide a positive influence on the academic development of my students.	1	2	3	4	5	6	7	8	9	10
13. I can inspire a cooperative spirit among other teachers at my school.	1	2	3	4	5	6	7	8	9	10
14. I can involve the community in my school's instructional program.	1	2	3	4	5	6	7	8	9	10
15. I can communicate well with the administration in my school.	1	2	3	4	5	6	7	8	9	10

Table G_1 Continues

Table G_1 (Continued)

Please read the following items carefully and circle the appropriate response. The tasks for these items are the same as the items in Part I. For these items, please assess the strength of your personal beliefs in your capabilities to organize and execute courses of action to accomplish the following tasks.

The strength of my personal belief in my capabilities to organize and execute courses of action to ...	**1 2 3 4 5 6 7 8 9 10** **Extremely Weak Belief** **Extremely Strong Belief**
1. Manage discipline/behavior with all of my students.	1 2 3 4 5 6 7 8 9 10
2. Successfully complete all teaching tasks within the current time constraints.	1 2 3 4 5 6 7 8 9 10
3. Successfully teach my subject matter to all of my students.	1 2 3 4 5 6 7 8 9 10
4. Relate well with the parents of my students.	1 2 3 4 5 6 7 8 9 10
5. Involve all of my students in using higher order thinking skills.	1 2 3 4 5 6 7 8 9 10
6. Prepare all of my students to be successful on state mandated assessment tests.	1 2 3 4 5 6 7 8 9 10
7. Motivate all of my students to perform to their fullest potential.	1 2 3 4 5 6 7 8 9 10
8. Provide a learning environment that accommodates students with special needs.	1 2 3 4 5 6 7 8 9 10
9. Reach even the most difficult students.	1 2 3 4 5 6 7 8 9 10
10. Improve the academic performance of any child, including those with learning disabilities.	1 2 3 4 5 6 7 8 9 10
11. Work cooperatively with other teachers on day-to-day routine school tasks.	1 2 3 4 5 6 7 8 9 10
12. Provide a positive influence on the academic development of my students.	1 2 3 4 5 6 7 8 9 10
13. Inspire a cooperative spirit among other teachers at my school.	1 2 3 4 5 6 7 8 9 10
14. Involve the community in my school's instructional program.	1 2 3 4 5 6 7 8 9 10
15. Communicate well with the administration in my school.	1 2 3 4 5 6 7 8 9 10

Table G_1 Continues

Table G_I (Continued)

Please read the following items carefully and circle the appropriate response. The tasks for this part of the questionnaire are the same as for Part I. Please consider whether you are able to do each of the tasks listed.

TASK	1 2 3 4 5 6 7 8 9 10 Not able to Do — Definitely Able to Do
1. I am able to manage discipline/behavior with all of my students.	1 2 3 4 5 6 7 8 9 10
2. I am able to successfully complete all teaching tasks within the current time constraints.	1 2 3 4 5 6 7 8 9 10
3. I am able to successfully teach my subject matter to all of my students.	1 2 3 4 5 6 7 8 9 10
4. I am able to relate well with the parents of my students.	1 2 3 4 5 6 7 8 9 10
5. I am able to involve all of my students in using higher order thinking skills.	1 2 3 4 5 6 7 8 9 10
6. I am able to prepare all of my students to be successful on state mandated assessment tests.	1 2 3 4 5 6 7 8 9 10
7. I am able to motivate all of my students to perform to their fullest potential.	1 2 3 4 5 6 7 8 9 10
8. I am able to provide a learning environment that accommodates students with special needs.	1 2 3 4 5 6 7 8 9 10
9. I am able to reach even the most difficult students.	1 2 3 4 5 6 7 8 9 10
10. I am able to improve the academic performance of any child, including those with learning disabilities.	1 2 3 4 5 6 7 8 9 10
11. I am able to work cooperatively with other teachers on day-to-day routine school tasks.	1 2 3 4 5 6 7 8 9 10
12. I am able to provide a positive influence on the academic development of my students.	1 2 3 4 5 6 7 8 9 10
13. I am able to inspire a cooperative spirit among other teachers at my school.	1 2 3 4 5 6 7 8 9 10
14. I am able to involve the community in my school's instructional program.	1 2 3 4 5 6 7 8 9 10
15. I am able to communicate well with the administration in my school.	1 2 3 4 5 6 7 8 9 10

Table G_2

Initial 51 Item Expert Opinion Questionnaire

EXPERT OPINION QUESTIONNAIRE

We are interested in measuring teachers' beliefs about their capabilities to successfully accomplish various teaching tasks. Before we use the instrument, we need your help to verify the adequacy of the items we developed. In this instrument, teachers are asked to rate the ***strength of their personal beliefs in their capabilities*** to do the specific tasks listed in the table.

Please read each statement, and using the scale provided, rate each statement in terms of its importance and relevance to include on an instrument to measure the strength of teachers' personal beliefs in their capabilities to accomplish each task.

Thanks for your help!

Ratings: H = High importance and relevance to instrument development
M = Medium importance and relevance to instrument development
L = Low importance and relevance to instrument development

	Teaching Tasks (Item stem in TEBS: In my present teaching situation, the *strength of my personal beliefs* in my ability to...)	Importance in a measure of *belief in teaching ability* (CIRCLE ONE)
1.	**Plan activities that accommodate the range of individual differences among students[1]...**	H M L
2.	Plan activities that enable the development of thinking skills among students...	H M L
3.	**Plan evaluation procedures that accommodate individual differences among students ...**	H M L
4.	**Use allocated time for activities that maximize learning ...**	H M L
5.	**Effectively manage routines and procedures for learning tasks ...**	H M L
6.	**Clarify directions for learning routines ...**	H M L
7.	**Maintain high levels of student engagement in learning tasks ...**	H M L
8.	Actively involve students in learning, even passive learners ...	H M L
9.	**Redirect students who are persistently off task ...**	H M L
10.	Effectively monitor the behavior of students throughout the lesson ...	H M L
11.	Utilize techniques for stopping unacceptable behavior ...	H M L
12.	**Maintain a classroom climate of courtesy and respect ...**	H M L
13.	Maintain a classroom where students demonstrate positive personal interactions with others...	H M L

Table G_2 Continues

Table G_2 (Continued)

14.	Maintain a classroom environment that is *free* of sarcasm, ridicule, and derogatory remarks...	H M L
15.	Personalize activities and content based on students' personal experiences ...	H M L
16.	Recognize students' contributions to learning tasks ...	H M L
17.	**Maintain a classroom climate that is fair and impartial...**	H M L
18.	Involve students in reviewing past learning to prepare for new learning ...	H M L
19.	**Communicate to students the specific learning outcomes of the lesson ...**	H M L
20.	**Communicate to students the purpose and/or importance of learning tasks.**	H M L
21.	**Implement teaching methods at an appropriate pace to accommodate differences among students...**	H M L
22.	**Utilize teaching aids and learning materials that accommodate individual differences among students...**	H M L
23.	**Provide students with opportunities to learn at more than one cognitive and/or performance level ...**	H M L
24.	**Communicate to students content knowledge that is accurate and logical ...**	H M L
25.	Emphasize potential points of difficulty in content and in learning tasks ...	H M L
26.	Clarify misunderstandings or confusion through different use of words or examples...	H M L
27.	**Clarify student misunderstandings and difficulties in learning...**	H M L
28.	**Provide students with specific feedback about their learning ...**	H M L
29.	**Provide students with suggestions for improving learning ...**	H M L
30.	**Actively involve students in developing concepts...**	H M L
31.	Actively involve students in developing principles, rules, and/or generalizations...	H M L
32.	**Solicit a variety of questions throughout the lesson that enable higher-order thinking...**	H M L
33.	**Actively involve students in critical analysis and/or problem solving ...**	H M L
34.	Actively involve students in elaborating, extending, or discussing their own or other students' responses.	H M L

Table G_2 Continues

Table G_2 (Continued)

35.	Provide opportunities that encourage students to think about their roles and responsibilities as thinkers and learners ...	H M L
36.	**Monitor students' involvement during learning tasks ...**	H M L
37.	Solicit a range of student responses as appropriate to assess various levels of learning...	H M L
38.	**Adjust teaching and learning activities as needed ...**	H M L
39.	**Manage student discipline/behavior ...**	H M L
40.	Complete teaching tasks within current time constraints ...	H M L
41.	Relate well with parents of my students...	H M L
42.	**Involve students in developing higher order thinking skills ...**	H M L
43.	**Motivate students to perform to their fullest potential...**	H M L
44.	**Provide a learning environment that accommodates students with special needs...**	H M L
45.	Reach my most difficult students ...	H M L
46.	**Improve the academic performance of any of my students, including those with learning disabilities...**	H M L
47.	Work cooperatively with other teachers on day-to-day routine school tasks ...	H M L
48.	**Provide a positive influence on the academic development of my students...**	H M L
49.	Inspire a cooperative spirit among other teachers at my school ...	H M L
50.	Communicate well with the administration in my school ...	H M L
51.	**Maintain a classroom environment in which students work cooperatively...**	H M L

[1] Highlighted items included in final 30-item version of the TEBS-S.

VITA

Jacquline Jeanine Green-Bobbett is the daughter of Jack and Etta Green who currently reside in Gladewater, Texas. Jacquline was born in Silverton, Oregon, and attended the public school systems in Oregon, California, Texas, and New Hampshire. Since 1972, Jacquline has been involved as a teacher in a variety of private and public settings (e.g., Sunday school, private day care, Headstart program, K-12 public schools, and aerobics instructor for a young adult conservation corp). She attended college preparatory classes while at the Takhli Royal Thai Air Force where she also served as a goodwill ambassador for the Base Chapel located in Takhli, Thailand.

Jacquline has also served as a volunteer in a variety of organizations. She credits her administrative skills to the diverse leadership training and to her roles in the American Red Cross, Department of Health, Education, and Welfare, the Air Force Civilian Base Personnel Office, Camp Fire Girls of America, Volunteers in Public Schools, Parent Teacher Association, and Booster Clubs.

While her educational endeavors beyond high school were initiated at Boise State University, for Jacquline her first educational milestone was the attainment of the Associate of Arts in behavioral science at Kilgore Junior College. She has since earned the degree of Bachelor of Science in sociology, and the degree of Master of Public Administration, both from the University of Texas, Tyler. Her doctoral studies in the Department of Educational Administration and Supervision are now complete and she will receive the degree of Doctor of Philosophy in August, 2001.

For the past eight years, Jacquline has been employed as an administrator with the Louisiana Department of Education. Her current responsibilities as a Section

Leader with the Division of School Standards, Accountability, and Assistance involve reform initiatives in the areas of reading and basal textbook adoption.

Jacquline is married to Allen Forest Bobbett. They have two children: Tamara and Jason. They have two grandchildren: Caleb and Joshua.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Jacquline Bobbett

Major Field: Educational Administration and Supervision

Title of Dissertation: School Culture, Teacher Efficacy, and Decision Making in Demonstrably Effective and Ineffective Schools

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

May 7, 2001